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“Wolf Totem” – metaphorical narrative of sustainability reporting practice from a balanced ecosystem perspective: a longitudinal study of sustainability reporting by Chinese banks

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"WOLF TOTEM" – METAPHORICAL NARRATIVE OF SUSTAINABILITY REPORTING PRACTICE FROM A BALANCED ECOSYSTEM PERSPECTIVE: A LONGITUDINAL STUDY OF SUSTAINABILITY REPORTING BY CHINESE BANKS

A thesis submitted in fulfilment of the requirement for the award of the degree

DOCTOR OF PHILOSOPHY

From

UNIVERSITY OF WOLLONGONGONG

By

Tairan (Kevin) Huang

B.Com (Hons)

School of Accounting, Economics and Finance

2016

Certification

I, Tairan (Kevin) Huang, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Accounting, Economics and Finance, Faculty of Business, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Tairan Kevin Huang

18 August 2016

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Abstract

This research attempts to explain and evaluate corporate sustainability reporting practices from an ecosystems perspective, through the application of metaphors. It argues that commonly held ideas of sustainable development, which many firms embrace to produce sustainability reports, narrowly focus on the sustainability performances of individual firms and fail to comprehend a broader systems view, that incorporates a holistic understanding of sustainability embracing ecological perspectives. The study draws on the work of Chinese intellectual Jiang Rong, author of a best-selling semi-autobiographical novel *Wolf Totem*, which documents the life experiences of a Beijing student sent to the Inner Mongolian countryside during China's Cultural Revolution. Reflecting on his experiences, the author describes the powerful interrelationships between human beings, animals, nature and culture that work in harmony to sustain nomadic life. The novel is used in this research as a contextual landscape to construct a series of multi-tiered metaphors to make sense of corporate sustainability reporting through metaphorical interpretations. By narrating the Chinese banking sector as the "ecosystem", various actors within the sector are examined to establish their roles and functions in the ecosystem. This is made possible by conducting a summative content analysis on sustainability reports issued by Chinese banks for the period 2008 to 2012 and a metaphorical narrative representation of the findings. This research aims to become one of the first studies of its kind to use a cross-disciplinary framework and application of metaphors to comprehend sustainability reporting practice with a focus on the context of a financial service sector in a strong, emerging economy.

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List of Abbreviations Used

Abbreviation	Description
ABC	Agricultural Bank of China
BOC	Bank of China
BOCOM	Bank of Communications
CBRC	China Banking Regulatory Commission
CCB	China Construction Bank
CDB	China Development Bank
CIB	China Industrial Bank (Xingye Bank)
CMB	China Merchants Bank
CSR	Corporate social responsibility
FOB	Foreign-owned bank
GRI	Global Reporting Initiative
HSBC	Hongkong and Shanghai Banking Corporations
HSBCC	Hongkong and Shanghai Banking Corporations China
ICBC	Industrial and Commercial Bank of China
JSB	Joint-stock bank
NPL	Non-performing loan
PBOC	People's Bank of China
RMB	Ren Min Bi, the Chinese official currency
SCB	Standard Chartered Bank
SCBC	Standard Chartered Bank China
SMEs	Small to medium enterprises
SOB	State-owned Bank
SOE	State-owned enterprises
SPD	Shanghai Pudong Development Bank
TBL	Triple bottom line
USD	United States dollars

Chapter One: Introduction

> In the spring of 2002, Batu and Gasmai phoned Chen Zhen[1] to say, "Eighty percent of the Olonbulag pastureland is now desert. In another year the whole area will change from settlement herding to raising cows and sheep, more or less like the animal pens in your farming villages. Every family will build rows of big houses.
>
> Chen Zhen didn't know what to say.
>
> A few days later, a yellow-dragon sandstorm rose up outside his window, blocking the sky and the sun. All of Beijing was shrouded in the fine, suffocating dust. China's imperial city was turned into a hazy city of yellow sand.
>
> -- Epilogue, *Wolf Totem,* Jiang (2008)

Human activity has always caused impacts on ecology (Commoner, 1971; Halpern et al., 2008; Belkin, 2009). Some of the negative impacts, such as deforestation, the greenhouse effect, marine pollution and ozone depletion have developed into serious sustainability concerns (Rees and Wackernagel, 1996; Van den Bergh and Verbruggen, 1999; Siche et al., 2008). However, there is still a disconnection between sustainability reporting practices and real concerns for ecology (Milne and Gray, 2013). This research aims to provide a narrative that demonstrates how an ecosystem perspective can be embraced when evaluating the sustainability reports issued by firms in a business sector, and to argue that ecosystem balance and harmony are essential criteria for pursuing sustainability.

This introduction chapter provides an outline of the research purpose, background and motivation, before presenting the research questions that are addressed in subsequent chapters. A brief summary of the thesis structure is included to elaborate how this thesis scaffolds the research agenda. This research aims to find means by

[1] Chen Zhen is the quasi-autobiographical protagonist in *Wolf Totem*. Batu and Gasmai are two Mongolian nomads, who are close friends of Chen Zhen during his stay in the Mongolian grassland.

which to examine sustainability reporting practices from a new perspective, analysing and making sense of firms' sustainability disclosure content through frames of metaphorical concepts developed from *Wolf Totem*, an ecosystem-oriented novel. First, it addresses current issues with defining sustainability (sustainable development), and why different interpretations of definitions affect sustainability practices;it then proposes that the ultimate objective of a sustainable world should be the consideration of a balanced ecosystem perspective rather than an economic orientation. This research uses the Chinese banking sector as an example of a complex ecosystem to evaluate the way that each type of Chinese bank (as different species in an ecosystem) behaves and functions. This is achieved through examination of the banks' sustainability reports, and demonstrates how an ecosystem view (in contrast to viewing each bank in isolation) can be incorporated into the analysis of the reports' content. Additionally, this research emphasises both the importance of ecosystem thinking (a philosophical system of thought promoted in the novel *Wolf Totem*) and how an ecosystem perspective on sustainability can be used to evaluate firms' disclosures of sustainability performances. This research aims to contribute to the future evolution in the field of sustainability research, by considering sustainability practices at a system level and acknowledge the value of systems thinking by reconnecting ecological thoughts with understanding of sustainability.

1.1 Purpose of the Research

Nola Buhr once commented that she is "not convinced that such a thing as sustainability reporting exists", or in other words, it still "remains an unattainable ideal" (2007, p.57). She drew this conclusion based on the notion that there is no "coherent picture of what a sustainable society or a sustainable business would look like" (Bebbington and Thomson, 1996, p.i-ii), and that, in a capitalist society, the needs of obtaining economic value outweigh the needs of providing social responsibility (Gray and Milne, 2004). Moreover, Buhr addressed one fundamental issue that challenges the meaningfulness of sustainability reporting, stating that "how one part (a single corporation) in a social ecosystem can fully understand and report on the role it plays and the impact it has on the rest of social ecosystem" remains a myth (2007, p.58).

As a response to Buhr's critiques on the current state of sustainability reporting, this research aims to provide a new metaphorical representation for sustainability and discusses whether evaluating sustainability reporting from an ecosystem perspective is viable and meaningful. Using this metaphor, this research describes a concept of sustainability that transcends its current economic-oriented definition, and, in the process, addresses the issue that this sort of commonly accepted definition of sustainability does not fully capture a view of system holism. Using the story of *Wolf Totem* as a demonstration, this research argues that when such an economic-oriented definition is embraced in the development of sustainability principles or the production of sustainability reports, unintended consequences could occur due to localised optimisation and consequential harms imposed upon system balance and harmony.

Moreover, as globalisation progresses, sustainable development for modern business becomes more complicated with higher level of uncertainty and turbulence. In such a complex and fast-evolving environment, systems thinking is proposed as a way of managing challenging issues related to sustainable development (Doppelt, 2012). However, as Jenkins (2010) suggests, current frameworks guiding sustainability reporting (such as the Global Reporting Initiative) are more correlated to the techno-centric conception of sustainable development, and lack ecological and holistic system consideration. Thus, systems thinking's philosophical value and significance to the understanding of a sustainable world has not been fully implemented in the current practices of sustainability management and reporting.

Thus, to integrate the concept of ecological holism and systems thinking with understanding of sustainability reporting, this research uses metaphors to demonstrate how sustainability reporting can be viewed from the perspective of ecosystems thinking. A metaphorical framework will be constructed and used as an interpretation device to convey meanings of Chinese banks' sustainability reports. This is inspired by the popular Chinese novel *Wolf Totem*.

1.2 Research Motivation – Wolf Totem

Jiang Rong's *Wolf Totem* (2008) is a multi-award-winning semi-autobiographical novel that describes the relationship between human beings and nature, based on the author's life experience with the nomadic Mongolians during the period of the Chinese Cultural Revolution. By narrating the progressive ecological changes of the grassland in Inner Mongolia, the novel provides an insightful critique of environmentally damaging human behaviours driven by greed and short-sightedness. Specifically, the story traces the causes of ecological disasters and suggests that human economic development (in the form of agricultural collectivisation and industrialisation) has largely contributed to these crises, resulting in significant impacts on the lifestyle and culture of Mongolian nomads (Kremb, 2006).

The ecological crises described at the end of *Wolf Totem* became a reality not long after the timeline of *Wolf Totem*'s story end. The size of the natural grasslands in the

Inner Mongolia Province of China shrinks each year, due to the expansion of industrial development. The Inner Mongolia Academy of Social Science (2009) reports that the proportional size of sanded grasslands in Inner Mongolia rose from fifteen percent in the 1970s to approximately sixty percent in year 2008. The report acknowledged that the root cause for the degradation of the grasslands is the deterioration of the environment caused by the combined effect of human activities and changes to the natural conditions, resulting in a detrimental impact on the structural features and functional processes of the grassland ecosystem.

Scientific research concerning the Inner Mongolia grasslands has reached a similar conclusion: that the progressive change of human behaviour in the local area has significantly affected the grassland ecosystem's stability, biodiversity and energy balance. These changes have led to unfavourable, even catastrophic, consequences for the grassland ecosystem (for example, see Liu et al., 2002; Bai et al., 2004; Naeem, Duffy and Zavaleta, 2012). Based on these findings, it is fair to say that although *Wolf Totem* is semi-autographical and semi-fictional, it is not without academic value. The fact that *Wolf Totem*'s narrations of human impact on the environment are consistent with scientific evidence makes its story a meaningful argument that a better understanding of ecosystem balance is important for a sustainable future.

Concerns about sustainability in the Inner Mongolian grasslands have attracted global attention. Because Inner Mongolia can be considered a case study of climate change and sustainability, Greenpeace has persisted in its efforts to increase public awareness of the region's devastating environmental issues. The pictures below reveal how industrialised coal production has put the iconic Inner Mongolia grasslands under survival threat.

Image 1: Industrial coal production in Inner Mongolia

(photograph by Lu Guang; source: Greenpeace, 2012)

Image 2: A shepherd tending his sheep on the Inner Mongolia grasslands

(photograph by Lu Guang; source: Greenpeace, 2012)

In an interview, the author of *Wolf Totem*, Jiang Rong emphasises that he does not wish people to treat his book as just a work of fiction. Rather, he says, "I use my own witnessed facts to expose and criticize the destruction of grassland caused by agricultural civilization, aim to awaken people by reflecting our own weaknesses."[2]The later chapters of this thesis will expand on Jiang's narration to reveal how ecosystem thoughts and systems thinking have been reflected in the narration of *Wolf Totem* and to illustrate why balance and harmony are important for a sustainable ecosystem.

1.3 Key Concepts – Ecosystem Thinking, Sustainability and Metaphor

By using *Wolf Totem* as a vehicle, this research aims to connect three domains of knowledge: ecosystem thinking, sustainability reporting practice, and imposition and application of metaphor. It considers that all three areas of knowledge have strong relationships with the notion of sustainability, and are in turn influencing and are influenced by different understandings of sustainability and the evolution of this complex concept. In addition to imposing *Wolf Totem* as a new metaphorical concept of sustainability, this research portrays the structural context of the grassland ecosystem and the actors within it as sub-tier metaphors to convey new meanings to the sustainability reporting practices adopted by Chinese banks. This multi-tiered metaphorical framework will be used to construct a narrative interpretation of the rapid-developing Chinese banking sector and its sustainability reporting practices.

In the following chapters, this research will investigate these three domains of knowledge and demonstrate how a metaphorical narrative approach can be used to integrate the theoretical value embedded in these disciplines and better comprehend sustainability, and sustainability reporting, in the unique context of the Chinese banking sector. Stories from *Wolf Totem* are used in overlay with the review of literature concerning these three key concepts to illustrate how these concepts are

[2]Translated by the author from Jiang Rong's interview with Southern Weekly Magazine, April 2008.

elaborated in the writing of the novel, and hence making *Wolf Totem* a meaningful inspiration of the construction of the metaphors used in this research.

1.4 Research Questions

Using metaphors, combined with a narrative interpretation of the sustainability reporting of Chinese banks from 2008 to 2012, this research aims to address the following research questions:

RQ1. How do different types of Chinese banks disclose their sustainability-related performance?

RQ2. How can the use of metaphorical concepts to describe different types of Chinese banks explain the differences (if any) in their sustainability disclosure?

RQ3. How can the ecosystem perspective of sustainability (which is portrayed by using a set of multi-tiered metaphors) be used to comprehend the sustainability environmental setting of the Chinese banking sector?

In relation to the first and second research question, this research correlates relevant attributes of different types of Chinese banks with metaphorical concepts, and explains how these metaphors can provide some insights when used to interpret and comprehend the content of the banks' sustainability reports. Furthermore, this research demonstrates how these metaphors can also be further applied to make sense of how Chinese banks make different choices in sustainability disclosure in response to the changing domestic and international environment.

1.5 Thesis Structure

This introductory chapter has presented the purpose of this research, the research motivation, the key concepts and theoretical considerations this research will embrace, and the research questions it aims to address. The remainder of the thesis is organised into eight chapters.

Chapter Two provides an overview of the background context of this research: the Chinese banking sector. It highlights the sector's important place in the Chinese and global economy, outlines its current structural setting and details its significance in considerations of sustainability.

Chapter Three focuses on the first theoretical concept this research embraces – ecosystem thinking, as a conceptual intersection of ecological thoughts and systems thinking. Ecosystem thinking is positioned as a methodological tool to integrate an ecological understanding of the world with the philosophy of systems thinking in clarifying confusing and complex relationships, and hence to inform a new understanding of sustainability.

Chapter Four reviews the second important theoretical input for this research: the concept of sustainability. By examining different perspectives on sustainability, it provides detailed discussions on why the currently accepted interpretation of sustainable development departs from ecosystem balance and harmony, which could be detrimental for achieving the objective of a sustainable ecosystem.

In Chapter Five, metaphor is introduced as a powerful discursive tool which can be used to defamiliarise the concept of sustainability. Furthermore, it establishes the metaphorical transfer framework this research applies to show resemblances between research objects and its metaphorical concepts.

The process of providing metaphorical narrative is progressively scaffolded in Chapters Six through Eight. Chapter Six outlines the design of this research, discussing how a summative content analysis of the Chinese banks' sustainability reports and a follow-up narrative can be used to give new meanings to the findings. Chapter Seven presents the results of the analysis and demonstrates how metaphorical interpretation can be used to explain observed trends and features and provide alternative views to traditional sustainability research. Chapter Eight conducts a narrative analysis to illustrate further applications of the metaphors in examining how Chinese banks disclosed their sustainability performances in response to a series of mega-events and establishing a metaphorical concept mapping of the Chinese banking sector based on the metaphors.

Chapter Nine concludes this research. It outlines how research questions have been addressed, evaluates research contributions and limitations, and indicates some directions for future research.

Chapter Two: Research Background- the Chinese Banking Sector

> Banking institutions, serving as a major financing vehicle for businesses and individuals, are the driving force to realizing China's technology progression and economic restructure as well as global sustainable development. The business behaviour of banks is influencing the environment and society and shapes our future.
>
> - World Wildlife Fund China, (2013, p.1)

The Chinese banking sector is selected as the background for this research, because of its complex, ecosystem-like structure, and the unique and important role that banks play due to their direct and indirect impacts on many aspects of sustainability. A metaphorical transfer between the grasslands in the story of *Wolf Totem* and the Chinese banking sector is established in Chapter Six to highlight the similarities in terms of ecosystem attributes and features.

2.1 The Structure of the Chinese Banking Sector

The Chinese banking sector structurally differs from many other banking systems in the world (Reserve Bank of Australian, 2012) in the specifics of its multi-tiered system. At the authoritative level, the central bank –the People's Bank of China and the China Banking Regulatory Commission are the two supervisory bodies that oversee all financial institutions operating in China (Naughton, 2007; China Banking Regulatory Commission, 2008; 2012). Other players, separated by different ownership structures and size, include state-owned large commercial banks (hereafter state-owned banks), joint-stock commercial banks, policy banks, small city and rural financial institutions, and foreign-owned banks (China Banking Regulatory Commission, 2012).

The Chinese financial system reform in 1978 devolved various banking functions to establish China's commercial banking system (Lin and Zhang, 2009). Four specialised state-owned banks (Bank of China, Industrial and Commercial Bank of

China, Agricultural Bank of China and China Construction Bank) were established at that time. These four major banks are commonly referred to as the “Big Four” in the Chinese banking sector for their enormous size and resources even when compared to the world’s largest banks (Naughton, 2007). Together with the later addition of Bank of Communications (BOCOM), these five largest state-owned commercial banks account for more than half of Chinese banking system’s assets and deposits (Reserve Bank of Australia, 2012).

In the late 1980s and early 1990s, joint-stock banks (partially state-owned) were established and gained rapid growth in the sector, as the first public shareholding banks in China (Lin and Zhang, 2009). To reduce the operating risks related to financing other state-owned enterprises and projects for commercial banks, the State Council of China established three policy banks (fully state-owned) with responsibilities to support development in urban areas, development in rural areas and export-import trade respectively (Berger, Hasan and Zhou, 2009). At the end of the 20th century, after the promulgation of the *Commercial Bank Law* in China, city-level commercial banks were incorporated by mergers and acquisitions between rural credit unions.

Since then, the overall structure for the Chinese banking sector has remained as a multi-tiered system where the five large state-owned banks (the “Big Four” and the Communication Bank of China) make up the first tier. Twelve large joint-stock commercial banks form the second tier, and the third tier is made up of over a hundred smaller city-level commercial banks and thousands of rural cooperative banks (Naughton, 2007). In additional to domestic Chinese banking institutions, foreign banks also operate in China in the forms such as locally incorporated institutions, branches and subsidiaries (China Banking Regulatory Commission, 2012). However, in comparison to the domestic Chinese banks, foreign-owned banks have been unable to establish market positions in China, and represent less than two percent of total assets (Reserve Bank of Australia, 2012; China Banking Regulatory Commission, 2012).

Table 1summarises the value of total assets (2008-2012) held by each type of bank in the Chinese banking sector.

Table 1: Total Assets by Bank Type (2008-2012)

Bank's Asset Size by type (in Bn USD)	2008		2009		2010		2011		2012	
	Asset	%	Asset	%	Asset	%	Asset	%	Asset	%
State-owned Banks	4,610.61	51.58%	5,976.29	51.31%	6,989.24	49.20%	8,324.77	47.34%	9,581.73	44.93%
Policy Banks	799.04	8.94%	1,017.38	8.73%	1,140.49	8.03%	1,445.57	8.22%	1,790.17	8.39%
Joint-stock Banks	1,250.30	13.99%	1,731.10	14.86%	2,072.24	14.59%	2,852.77	16.22%	3,754.66	17.61%
Foreign Banks	190.34	2.13%	197.63	1.70%	259.68	1.83%	334.26	1.90%	379.89	1.78%
Other institutions*	2,088.04	23.36%	2,724.77	23.39%	3,742.89	26.35%	4,626.59	26.31%	5,818.20	27.28%
Total	8,938.32	100.00%	11,647.16	100.00%	14,204.53	100.00%	17,583.96	100.00%	21,324.65	100.00%

*Other institutions in the Chinese banking sector include the Post Saving Bank of China, small city banks, rural cooperative banks, urban and rural credit unions, and non-bank financial institutions, as indicated by the China Banking Regulatory Commission (2012, p.148).

The financial data presented in Table 1 is obtained from the China Banking Regulatory Commission (2012)'s annual report, originally reported in the Chinese currency Ren Min Bi (RMB). Exchange rates obtained from XE (www.xe.com) are used to convert the data into US dollars. The annual exchange rate used for currency conversion in this research is calculated as the average of the XE quoted exchange rates at the beginning and end of the year (Table 2).For instance, the rate used for converting financial data reported in 2008 reports is the average of the XE quoted rate at 1 January 2008 and 1January 2009.

Table 2: Chinese RMB and USD Conversion Rate (2008-2012)

Date	Exchange Rate (obtained from XE)	Year	Average
1 Jan 2008	7.3046	2008	7.0653
1 Jan 2009	6.8259	2009	6.8270
1 Jan 2010	6.8280	2010	6.7095
1 Jan 2011	6.5910	2011	6.4427
1 Jan 2012	6.2943	2012	6.2661
1 Jan 2013	6.2379		

The data in Table 1 shows that the Chinese banking sector's total assets grew continuously from 2008 to 2012, and its total assets in 2012 are more than double the 2008 figure. All types of banks achieved similar asset growth rate as the sector as a whole. The proportion of total assets held by both the policy banks and the foreign banks remained consistent, at approximately eight percent and two percent respectively. Although state-owned banks still hold the largest proportion of assets in the Chinese banking sector, the figure progressively declined between 2008 and 2012. In contrast, the share held by joint-stock banks slowly increased in the same period.

In later chapters of this thesis, the tiered structure of the Chinese banking sector is compared to the Mongolian grassland ecosystem in a metaphorical sense. Such a comparison enables this research to provide an ecosystem view of the sector, and uses concepts embedded in ecosystem thinking to elaborate how different types of financial institutions in China and other key players function collectively and interactively to support a holistic system.

2.2 Performances, Opportunities and Risks

The banking industry has been one of the most profitable sectors in China (Wang 2010). On the whole, the Chinese banking industry has achieved enormous growth in assets since the financial sector reform, and its competitive strength as a whole has significantly increased in both domestic and international markets. As of 2012, six Chinese banks[3] were among the world's 50 largest financial institutions, and the "Big Four" ranked in the top 20 (Global Finance, 2012). This shows significant growth from 2008,where only four Chinese banks[4] ranked between 20th to 50th (Global Finance, 2008). Chinese banks' experience and skills in operation management and financial risk management have both grown, and the governmental regulation of the banking sector has matured and strengthened following the reform, leading to the overall sector growth (Fu and Heffernan, 2009). However, it is worth noting that the rapid growth of privileged and dominant state-owned banks accounts for the majority ofthe sector's success ("The East is grey", 2010; Wilson, 2014). Furthermore, recent media coverage and public debates have expressed concerns that Chinese banks' golden era has past, and that they could be facing severe crises such as a market melt-down (Wang, 2015; Guilford, 2015; Wilson, 2014).

One of the major risks to Chinese banks' economic sustainability is the economic downturn following the Global Financial Crisis (China Banking Regulatory Commission, 2008). Following the crisis, many Chinese banks suffered losses caused by increasing non-performing loans, and the reliance on state-government sponsorship to payback those loans constitutes future financial risks for both the sector and the state government (Berger, Hasan and Zhou, 2009). In addition, inflation and price turbulence in the Chinese real estate market and the stock market are considered to cause the greatest risks for mortgage and business loans, and the Chinese banking sector faces difficulties in balancing the need for loanable funds to

[3] ICBC (fourth), CCB (eleventh), BOC (thirteenth), ABC (fifteenth), China Development Bank (CDB) (twenty-sixth) and BOCOM (thirty-seventh).

[4] ICBC (nineteenth), CCB (twenty-sixth), ABC (thirty-first) and BOC (thirty-second).

support necessary business innovation and economic development with the exposure to credit risks (Jia, 2009).

However, Chinese domestic banks still have large potential for growth, and both the return on capital and capital-utilities ratios reveal opportunities (China Banking Regulatory Commission, 2008). The commercial driving force and the pursuit of profit maximisation following commercialisation process has intensified competition between banks, especially in the more developed regions and cities in China (Fu and Heffernan, 2009). According to the China Banking Regulatory Commission (2008), a major shift for the Chinese banking industry will focus on banking product innovations to meet changes in customer demand. New products and services are needed in order to help investors effectively manage short-term interest rate risk or the appreciation of the Chinese national currency. The competition among Chinese domestic banks is likely to further intensify. In addition to the traditional business area such as loans made to other state-owned enterprises and mortgage loans, other profit sources are rapidly becoming significant for Chinese domestic banks, including banking credit cards, small to medium enterprises (SMEs) financing, personal financial management, and cash management (Chang et al., 2012).

Thus, the Chinese banking sector has experienced changing external conditions that have influenced its overall performance. By using a metaphorical interpretation, this research aims to provide some evaluation on how Chinese banks have responded to some of these changes, through observation of the banks' disclosure of sustainability performance.

2.3 Relationship between Chinese Banks and Sustainability

According to the International Institute for Sustainable Development (2013), the key drivers of sustainability for banks include managing financial risks by comprehensively evaluating lenders' liability and prudently accessing borrowers' ability to repay, and adoption of energy and resource efficiency initiatives and programs, as well as innovation and proactive strategies to capture opportunities associated with sustainability (such as providing green product/services). In the Chinese banking sector, the China Banking Regulatory Commission (2007) issued the *Notice of the General Office of China Banking Regulatory Commission on Strengthening the Banking Financial Institutions on Views of Social Responsibility*, a commentary letter on Chinese banks' management and reporting of social responsibility. It explicitly stated that Chinese financial institutions should at least meet the objectives to protect the shareholders' rights; value employees and respect their rights; conduct business in an honest way by protecting consumers' rights, engaging in fair competition, and taking a stand against money laundering and corruption; be energy efficient and protect and improve environmental qualities; support the development of communities; and support charitable causes. Therefore, in essence, although the Chinese banking sector has a unique structural system, the China Banking Regulatory Commission recommends that Chinese banks follow the principles of sustainable development adopted by international banks (World Wildlife Fund China, 2013).

One of the mostly debated issues for banks' sustainability management and performance is the concept of responsible lending. The *Equator Principles* have become a widely adopted global standard for banks when implementing responsible lending in their operation and attempting to address environmental, social and governance issues (Wright and Rwabizambuga, 2006; O'Sullivan and O'Dwyer, 2009; Conley and Williams, 2011). In China, the China Banking Regulatory Commission promulgated the *Green Credit Guidelines* as a means of assisting Chinese banks to improve sustainable performances by better managing social and environmental risks in lending service (World Wildlife Fund China, 2013). Similar to the *Equator Principles*, the *Green Credit Guidelines* encourage Chinese banks to provide financial support to green, low-carbon and recycling economies. However, the *Equator Principles* have increased the attention to the social dimension of sustainability, addressing concerns in areas such as indigenous communities and labour standards (*Equator Principles*, 2013). In contrast, the *Green Credit Guidelines* remain environmentally focused (Aizawa and Yang, 2010).

Thus, Chinese banks are seen to be influenced by both domestic and international sustainability principles. The China Banking Regulatory Commission(2007) strongly states that Chinese banks have both legal and moral duties to fulfil their responsibilities towards a broader range of stakeholders including shareholders, staff, consumers, communities, the environment, and the wider Chinese society. Due to their significant weight in the Chinese and global economy, Chinese banks' fulfilment of these responsibilities will cause significant impact on the economy, politics, and cultural life of both Chinese and global citizens, with the potential to contribute significantly to sustainability worldwide.

Furthermore, the unique national and cultural context of China may be influential factors driving Chinese banks' sustainability management and reporting practices (Wang and Juslin, 2009; Marquis and Qian, 2013; Noronha et al., 2013). Since 2007, "Harmonious Society" and "Harmonious World" became the central themes of

China's policy discourse under State President Hu Jintao (Zheng and Tok, 2007). This is a significant change from the previous domestically-oriented economic pragmatism under the era of Deng Xiaoping and Jiang Zemin (Zheng and Tok, 2007). By using *Wolf Totem* as a metaphor to describe Chinese banks' sustainability reporting, this research attempts to correlate China's unique socio-political context with how Chinese banks disclose their sustainability performances as means to demonstrates the relationship between national policy setting and businesses' sustainability practices.

2.4 Literature on the Chinese Banking Sector

The structural uniqueness and the rapid growth of the Chinese banking sector has attracted much research interest, with a strong focus on evaluating Chinese banks' financial performance including profitability, cost and operational efficiency (for example see: Chen, Skully and Brown, 2005; Shih, Zhang and Liu, 2007; Ariff and Luc, 2008; Berger, Hasan and Zhou, 2009; Berger, Hasan and Zhou, 2010; Avkiran, 2010; Asmild and Matthews, 2012). Many correlate the banks' performances with ownership structure characteristics, commonly suggesting that less concentrated banking ownership often leads to increased profitability, and criticising the "Big Four" state-owned banks for being the main drag on the sectors' profitability (Xu and Wang, 1999; Sun, Tong and Tong, 2002; Cull and Xu, 2005; Garcia-Herrero, Gavila and Santabarbara, 2009; Lin and Zhang, 2009; Berger, Hasan and Zhou, 2009).

Research aiming to identifying the cause of state-owned banks' weak performance has found that political connections within and among these banks due to their ownership structure have become a double-edged sword. On the one hand, state-owned banks have been being privileged in dominating deposit collections and gaining access to equity markets due to their political connections (Cheung et al., 2005; Firth, Rui and Wu, 2011; Wu, Wu and Rui, 2012; Su and Fung, 2013). On the other hand, many suggest that such privilege also causes serious impediment for Chinese state-owned banks' growth in efficiency, causing them to display unfavourable characteristics such as poor corporate governance, lack of innovation, and low cost efficiency (Garcia-Herrero, Gavila and Santabarbara, 2009; Lin and Zhang, 2009; Berger, Hasan and Zhou, 2009; Firth et al., 2009).

The most serious issue impeding Chinese state-owned banks' performance is the burden of enormous non-performing loans (NPL). It results from the requirement that Chinese domestic banks mandatorily provide loans to other Chinese state-owned enterprises (Shih, 2004; Lu, Thangavelu and Hu, 2005; Lin and Zhang, 2009; Ariff and Luc, 2008; Berger, Hasan and Zhou, 2009; Bailey, Huang and Yang, 2012). To address this issue, the China Banking Regulatory Commission initiated a series of progressive banking reforms aimed at reducing state-owned banks' non-performing loans, and claims that both the size and the ratio of Chinese banks' non-performing loans have declined as the results of reform (2008; 2009; 2010; 2011; 2012). In other words, the state government of China politically intervened the operation of state-owned banks in response to the criticism. State-owned banks' ongoing process of shedding non-performing loans will be a determining factor for the Chinese banking sector's wellbeing (Berger, Hasan and Zhou, 2009; Bailey, Huang and Yang, 2012; García-Herrero and Santabárbara, 2013; Zhu, Wang and Wu, 2015).

As noted, policy banks were introduced to the Chinese banking sector as an essential mechanism of the banking reform process to take over the state-directed financing functions of the "Big Four" state-owned banks (Naughton, 2007; Reserve Bank of Australia, 2012). At present, there are three policy bank; each is dedicated to a specialised lending area. The China Development Bank (CDB) specialises in infrastructure financing, the Agricultural Development Bank (ADBC) mainly provides funds for rural and agricultural development projects, and the Export-Import Bank of China (CHEXIM or EIBC) focuses on international trade financing (Naughton, 2007). Findings of previous studies suggest that the establishment of these policy banks is the major contributing factor for the observed decline in state-owned banks' non-performing loans (in terms of both size and ratio), and that they are essential in supporting the Chinese banking sector as a whole (Podpiera, 2006; Firth, Lin and Wong, 2008; Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009; Jia, 2009).

The China Banking Regulatory Commission (2008) outlines the next tier of the Chinese banking sector consists of 12 joint-stock commercial banks[5]. Most of these joint-stock banks had been city-level banks controlled by local governments, and progressively became diversified-ownership banks following privatisation and public-offering processes (Sun, 2006; Fu and Heffernan, 2009). Although much smaller (in terms of assets, number of branches and operational scale) when compared to the enormous state-owned banks, previous studies have found that these joint-stock banks are more market-oriented, and achieve a higher profitability and efficiency (Sun, 2006; Garcia-Herrero, Gavila and Santabarbara, 2009; Berger, Hasan and Zhou, 2009; Matthews, 2013; Wang et al., 2014). The reduced state ownership and a consequently more diversified ownership structure have been recognised as contributing to better corporate governance mechanisms for these

[5] These are China Citic Bank, China Everbright Bank, Huaxia Bank, Guandong Development Bank, Shenzhen Development Bank, China Merchant Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Corporation, Evergrowing Bank, China Zheshang Bank and Bohai Bank.

banks, and in turn to enhanced accountability and improved efficiency and profitability (Berger, Hasan and Zhou, 2009; Liang, Xu and Jiraporn, 2013; Jiang, Yao and Feng, 2013). However, as Zhang, Tian and Li (2012) state, although joint-stock banks achieve enduring profit growth, there are also concerns about the rise in non-performing loans. Furthermore, as joint-stock banks' target business customers are usually small to medium enterprises, the banks' performances more vulnerable to cyclical economic downturn (Sun, Harimaya and Yamori, 2013).

Despite a very low presence in the Chinese banking sector, foreign-owned banks have drawn considerable interests from researchers (for example, see: Berger, Hasan and Zhou, 2009; Gopalan and Rajan, 2010; Hasan and Xie, 2013). It has been demonstrated that although they are severely handicapped due to trading restrictions, foreign banks are the "most profit efficient" (Berger, Hasan and Zhou, 2009, p.128). Furthermore, in addition to locally incorporated subsidiaries and licensed branches, foreign-owned banks' penetration of the Chinese market has also been realised through their direct investment in Chinese domestic banks (Berger, Hasan and Zhou, 2009; Gopalan and Rajan, 2010; Hasan and Xie, 2013). Although at a minority level, foreign banks' ownership in Chinese domestic banks has been recognised as one of the most important contributing factors improving Chinese banks' performance (Leigh and Podpiera, 2006; Laurenceson and Qin, 2008; Berger, Hasan and Zhou, 2009; Hasan and Xie, 2013; Luo et al., 2011). However, as Bayraktar and Wang (2004) suggested, the benefit that Chinese domestic banks receive from foreign bank entry can only be sustained through continuous financial liberalisation. A recent study by Li et al. (2015) examined other potential spillover effects of foreign banks' operation in China, indicating that in addition to strategic investment and minority control of ownership, the existence of foreign banks could also benefit Chinese banks in forms of employee mobility and competitiveness benchmarking.

Thus, as observed in the review of the literature, state-owned banks, policy banks, joint-stock banks and foreign-owned banks are all important players in the Chinese banking sector, and their behaviours, relationships and performances have been the subject of study. Although different types of banks in China have been studied collectively (for example, see: Lin and Zhang, 2009; Berger, Hasan and Zhou, 2009; Jia, 2009; Fu and Heffernan, 2009; Jiang, Yao and Feng, 2013), the research focus is often targeted at comparing and evaluating quantitative profitability or efficiency ratios between different types of banks. This research aims to elaborate an alternative creative approach to evaluating these different players in the Chinese banking sector, providing a metaphorical narrative to make sense of the relationships between these banks. Furthermore, this research uses the content of sustainability reports as research input, in contrast to previous studies, which have predominantly collected financial data from annual reports while largely overlooking Chinese banks' social and environmental responsibilities and performance. Hence, this research contributes to an understanding of the Chinese banking sector by extending from quantitative analysis of financial performance to a qualitative inquiry of their sustainability performance from a holistic, ecosystem-informed view.

Chapter Three: Ecosystem Thinking

> The distinction between social systems and ecological systems, and the linking of them into social-ecological system, is a useful simplification for teasing apart difficult problems.
>
> -Waltner-Toews, Lister and Bocking (2008, p.ix)

This chapter investigates the theoretical domain of ecosystem thinking and outlines how an ecosystem thinking model can conceptually link a social (business) system with an ecological system to facilitate examination of the Chinese banking sector and inform views on the concept of sustainability.

3.1 Defining Ecosystem Thinking

Ecosystem has been defined as "a biological community of interacting organisms and their physical environment" or in general application, "a complex network or interconnected system", (Oxford Dictionary, n.d.). The term "ecosystem thinking" has been used in a number of studies, with a broad range of interpretations. For example, Stremek's (2008) application of ecosystem thinking includes "integrating ecosystem knowledge" (p.1), "understanding ecosystem process" (p.4), and formulating and implementing "ecosystem strategies" (p.7), treating ecosystem thinking as a problem-solving tool to address concerning energy issues. Likens and Franklin (2009) put more emphasis on the preconditions for adopting ecosystem thinking, indicating that meeting challenges of complex environmental and social issues (deforestation, in their study) "require[s] holistic approaches that consider all elements of the ecosystem" (p.511). Moreover, Fisher et al. (2001) explain the difference between ecosystem thinking and ecology science, suggesting that ecosystem thinking is more abstract, "concerning how things work", while ecology science is more concrete and well-defined, concerning issues such as "the influence of spatial design and heterogeneity on system functioning" (p.181). In a business context, Keats (2011, p.16) explains how ecosystem thinking can be used in an organisation by considering "the core fundamental things that make ecosystems function". Hence, based on Keats's (2011) view, business organisations also display ecological characteristics. Although there are variations among these definitions, these researchers assert that ecosystem thinking is an effective approach to problem-solving, especially when the problem itself is complex and intertwined with economic, environmental and social implications.

This research defines "ecosystem thinking" as an integration between ecological thought and systems thinking. This has been explained by Davis and Stroink (2015) as the overlapping theoretical domain between the "systems thinking paradigm" and "an ecologically informed worldview" (p.1). This definition, and its theoretical implications, will be conveyed in the following sections of this chapter by reviewing each paradigm individually and as a joint concept.

3.2 Ecological Thought

3.2.1 Overview of Ecological Thought

In the second half of the 20th century, following worsening environmental conditions worldwide, ecological thought emerged a new epistemological approach and worldview (Worster, 1994; Code, 2006; Browne, 2007; Wang, 2011). Code (2006, p.43) provides a more specific definition of this concept:

> [I]t is a study of habitats both physical and social where people endeavour to live well together; of ways of knowing that foster or thwart such living; and thus of the ethos and habitus enacted in the knowledge and actions, customs, social structures, and creative-regulative principles by which people strive or fail to achieve this multiply realizable end.

According to Rooney (2009), research embracing ecological thoughts can address far more important moral and political issues compared to "narrow" empirical studies of relationships between different species, such as, the "ethical-political concerns" about species' survival and sustainability (p.171).

In essence, the fundamental philosophy that underlies ecological thought is built upon a recognition of the interconnectedness between different forms of life in a holistic system (Morton, 2010). This ecologically informed worldview holds that nature should be viewed as being connected by systems and communities, and that humans are actors who play a role in the holistic ecology, interacting with and influencing different components in the system (Keni, 2002). Thus, it is inappropriate to reduce the human-nature relationship to a linear model; as John Muir's famous quote says: "When we try to pick out anything by itself, we find it hitched to everything else in the universe" (Muir, 1911, p.110).

Thus, defining an appropriate relationship between human and nature is a central theme of the development of ecological thought (Code, 2006). Imperial ecologists consider that humans are dominant over nature (Worster, 1994). For example, Anker (2009, p.36) explains that under imperial management, the British Crown has historically been regarded as the property owner and manager of ecological colonies and natural assets. Furthermore, the Dominant Social Paradigm coined by Pirages and Ehrlich (1974, as cited in Kilbourne, 2006) highlights that the power of political, economic and technological institutions determines the relationship between quality of human life and the environment. Those embracing the Dominant Social Paradigm imply that the only appropriate way to use natural resources is to achieve economic gain (Dunlap and Van Liere, 1978, as cited in Davis and Stroink, 2015), and that it embodies values of individualism, economic growth, and material abundance, which all lack environmental and ecological considerations (Davis and Stroink, 2015).

In contrast, Arcadian ecologists hold that harmony is the essence of an appropriate relationship between humans and nature (Worster, 1994). Similarly, along with values such as collectivism and affective autonomy, harmony is embraced by Dunlap et al. (2000) as criteria of an ecology-informed worldview. Opposing the Dominant Social Paradigm perspective, an ecologically conscious worldview regards humans as not possessing dominance over nature, but rather that, humans should be held responsible for nature and understand that the action they take affects the wellbeing of nature (Keni, 2002; Davis and Stroink, 2015).

Ingold (1986) metaphorically explains the difference between the appropriation and exploitation of nature as the difference between "hunter" and "predator", or "gatherer" and "forager" metaphors to describe humans (p.3). More specifically, he considers that the "hunter" or "gatherer" metaphor represents "a self-conscious agent, confronting a world of plant and animals from which he or she selects that will furnish suitable raw materials for consumption", and on the other hand, "predator" or "forager" suggests human exploitation of nature by recognising plant or animals only as food (Ingold, 1986, p.3). Thus, as these metaphorical concepts communicate, the main difference between the two views is whether nature is respected and valued.

The novel *Wolf Totem* reveals that the conflict between the two views on the relationship between human and nature remains unsettled in modern society. In Jiang's (2008) narration, the author reflected that the Mongolian nomadic culture's understanding of nature is more ecologically conscious, as Mongolian nomads consider themselves guardians of the grasslands. At one point, Bilgee, the nomad tribal leader and mentor of the protagonist Chen, says, "We Mongols were sent by

Tengger[6] to protect the grassland. Without it, there'd be no Mongols, and without Mongols, there'd be no grassland" (Jiang, 2008, p.123). To fulfil the role as guardians of the grasslands, the nomads strictly obey their cultural traditional values of never taking more than they need from nature. In a hunting scene narrated in Chapter 12 of *Wolf Totem*, Bilgee warns the tribal hunters that they are only allowed to take the prey that have died in the hunt, and must set the living ones free. "When Genghis Khan finished an encirclement hunt, he let a small number of animals go. The Mongols have fought like that for centuries, and the reason that we can have these hunts year after year is that, like the wolves, we don't kill off all the prey" (Jiang, 2008, p.42). These narratives show that Mongolian nomad culture and tradition is supported by an ecologically informed understanding of the relationship between humans and nature.

3.2.2 Ecological Ethics and Ecological Aesthetics

As identified in the discussions above, to embrace ecological thought, an appropriate relationship between human and nature needs to be defined, established, and communicated. However, the relationship can be interpreted and explained from different perspectives within a broad range of domains of knowledge, including moral philosophies, arts, religions, laws, and science. Zhang (2004) considers that nature writing is an important contributing factor influencing the development of ecological ethics and aesthetics, which provides theoretical foundations for defining the relationship between humans and nature from an ethical and aesthetic perspective. This research provides discussion on various ecological ethical and aesthetic views

[6]Tengger is the heavenly spirit the Mongolian nomads worship.

observed in popular nature writings [7] and elaborates how these views provide conceptual inputs to formulate the ecosystem thinking model this research adopts.

Ethics, or moral philosophy, is a type of philosophy to distinguish right from wrong (Shaw and Barry, 2015), and addresses "the question of how one should live and act" (Curry, 2011, p.1). Ecological ethics, which emerged out of the environmentalist movement, extends the ethical question of how to treat other human beings and other animals to encompass the entire natural world (Zhang, 2004; Curry, 2011). Curry (2011, pp.3-4) clearly states that the development of ecological ethics is due to the inadequacy of existing ethical principles when addressing complex issues concerning holistic ecosystems, and further indicates that in many scenarios humans are not making an "unethical" decision on the ecosystem; rather, their activities are morally justified from other ethical dimensions (e.g. anthropocentric or instrumentalist views) which are lacking in ecology considerations. Hence, ecological ethics provides counter arguments towards traditional value judgements, promoting an eco-centric view and recognizing the intrinsic value of nature (Curry, 2011; Wang, 2004; Minteer and Collins, 2005).

There are many categories and sub-branches of ecological ethics. For example, Curry (2011) provides a framework of light, mid, and dark green categories to evaluate different perspectives of ecological ethics, highlighting that the difference lies at the level of questions of human purposes and values. Light-green, or shallow ecological ethics considers a technology-fix for environmental concerns to be viable; on the

[7] The term "nature writing" used in this research includes (but is not limited to) natural history essays, poetry, and essays of solitude or escape, as well as travel and adventure writing, as defined by Lyon (2001). This term is used interchangeably in this research with "ecoliterature" or "ecological literature" – terms used by Wang (2011) and Phillips (2003).

contrary, dark-green (deep) ecology argues that a radical redesign of social systems based on values and methods is needed to truly preserve the ecological diversity and integrity of nature (Naess, 1971; Curry, 2011; Devall, 2001; Tilley, 2000). Zhang (2004) uses a chronological framework to evaluate the development of ecological ethics, indicating that the changing social perceptions of the value of nature and non-human species are key drivers for the development of different ecologically grounded ethical perspectives.

Ecological ethics explains the moral responsibility humans have to maintain an appropriate human-nature relationship. However, different schools of ecological ethics focus on different aspects. For instance, enlightened-anthropocentrism (see: Katz and Oechsli, 1993; Zhang, 2004; Curry, 2011; Keulartz, 2012) holds the view that when the wellbeing of all humans, including the wellbeing of future generations, is given the highest priority, the health and integrity of ecological systems can be facilitated as well. Thus, enlightened-anthropocentrism ethics considers that valuing nature and recognising human dominance over nature are not mutually exclusive. Alternatively, animal-liberation ethics (see: Singer 1995; Callicott, 1980; Jamieson, 1998) extends human moral philosophies to the domain of animals, ethically rejecting human activities that cause animals to suffer. Further extending moral considerations to include all life-forms (not just animals), bio-centric ethics (biocentrism) considers that all living things have inherent value, and promotes the preservation and maintenance of biodiversity (Taylor, 1983; Zhang, 2004; Sterba, 2011). However, these different views do not fully consider the ecosystem in a holistic manner (Zhang, 2004).

3.2.3 Ecological Holism

The further development of ecological ethics is to extend moral responsibility from different species to the entire holistic ecosystem (Zhang, 2004). Developed from Rolston's argument, the ecological-holism view of ethics view holds that humans are responsible for not only the species that collectively comprise the ecosystem, but the ecosystem in its entirety (Zhang 2004; Curry, 2011).

The origins of ecological holism can be traced back to Leopold's work on land ethics (Zhang, 2004; Wang, 2011). In *A Sand County Almanac*, Leopold writes that "a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (1949, p.262). Therefore, instead of arguing that the diversity of each species needs to be preserved, ecological holism focuses on the maintenance of positive qualitative characteristics contributing to the entirety of the ecosystem. Under this view, human needs and benefits are not an essential criterion to evaluate the human-nature relationship; rather, maintaining ecosystem integrity, harmony, stability, and sustainability is the core objective to consider the appropriateness of human lifestyle, technology adoption, and economic development (Zhang, 2004; Freeman, 2005; Forster and Clark, 2008).

Some suggest that ecological holism should be embraced to achieve sustainable development, as the assumption that humans have an absolute understanding of, and thus control over, nature has been criticised as the cause of ecological crises (Kalland, 2002; Choi et al., 2008; Stables and Scott, 2010). Therefore, and as discussed further in Chapter Four of this thesis, the concept of ecological holism provides an ethical dimension to inform a new way of understanding sustainability, and critiques the current sustainable development principle in its emphasis of human needs over ecosystem values.

Incorporating ecological thoughts, particularly ecological holism, into policy development, can be counter-intuitive or impractical (Minteer, 2009; Curry, 2011). Due to the anti-anthropocentric view of many different schools of ecological thought, it would be difficult to motivate policymakers to embrace ecological thought if their incentives continued to focus on the advance of human interests, especially when these human needs are dire (such as need for food). In other words, a holistic imperative can be considered to be "philosophically as inescapable as it is impracticable" (Ulrich, 1993, p.584).

Given the practical limitation of ecological thought as a means of shaping new understandings of sustainability and sustainability management, this research embraces systems thinking, as a sub-set of general systems theory in the management literature, to offer a pragmatic alternative to existing sustainable development principles.

3.3 Systems Thinking

Richmond (1994) distinguishes systems thinking from general systems theory, system analysis, chaos theory, dissipative structures, operations research, and decision analysis:

> Systems Thinking is the art and science of making reliable inferences about behaviour by developing an increasingly deep understanding of underlying structure… Systems Thinking is a paradigm and a learning method. The first conditions the second. The second supports the first. The two parts form a synergistic whole (pp.6-7).

Another definition is provided by Senge (2006, p.113) in the highly influential *The Fifth Discipline Fieldbook:*

> Systems thinking [is] a way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behaviour of systems. This discipline helps us to see how to change systems more

> effectively, and to act more in tune with the natural processes of the natural and economic world.

Based on these definitions, it can be seen that systems thinking can be considered as a conceptual tool that enables the user to view a problem from a system's perspective. This research considers that through the incorporation of systems thinking, sustainability can be analysed, evaluated, and communicated in a paradigmatic way, providing complementary views of ethical and aesthetic considerations within ecological thought. In the following sections, discussions on different systems approaches are examined to provide a brief overview of how these systems approaches can be adopted to inform an understanding of sustainability from a systems perspective.

3.3.1 General Systems Theory

The origin of systems thinking, or a systems approach, is generally attributed to the general systems theory developed by Von Bertalanffy (Checkland, 1999; Kay, 2008). According to Kay (2008, p.7), general systems theory was "one of the first schools of thought that provided alternative models of inquiry to the reductionist methods of disciplinary science". The foundation of general systems theory, as explained by Von Bertalanffy (1972, p.411), is "a logico-mathematical field whose task is the formulation and derivation of those general principles that are applicable to 'systems' in general". Thus, from the perspective of general systems theory, instead of treating an individual organism as the unit of analysis, the study of organisms should be extended to systems (Checkland, 1999).

Central to general systems theory is the concept of a system. Banathy (1997, p.22) defines a system as "a configuration of parts connected and joined together by a web of relationships". Similarly, Backlund (2000) considers a system as a complex whole, the function of which depends on the interaction between the parts. The whole emerges from these dynamic interactions, with the parts affecting each other through positive or negative causal relationships. Therefore, recognising both the wholeness of a system, and the interconnectedness between its components, are important conditions for general systems theory.

Although originally rooted in biological science, the theoretical approach of general systems theory does have a broad aim to provide a deepened understanding of life, human, and society (Von Bertalanffy, 1969; 1972).

> This, then, is the aim of the systems approach: looking into those organismic features of life, behaviour, society; taking them seriously and not by passing or denying them; finding conceptual tools to handle them; developing models to represent them in conceptual constructs; making these models work in the scientific ways of logical deduction, of construction of material analogues, computer simulation and so forth; and so come to better understanding, explanation, prediction, control of what makes an organism, a psyche, or a society function (Von Bertalanffy, 1969, p.36).

Although it appears that mathematical description and analysis of system properties is essential to general systems theory, Von Bertalanffy does recognize its philosophical nature, suggesting that a reorientation of thought and worldview based on the concept of systems provides a new paradigm that contrasts with the analytical and linear-causal approaches of classical science (1972, p.411). Based on the quote above, Von Bertalanffy expected that general systems theory could be applied to all kinds of systems in a broad range of research fields.

However, according to Checkland (1999), general systems theory has not yet successfully become a meta-level problem-solving theory (as predicted by Von Bertalanffy). It does, however, make contributions within a number of different subject areas, including the development of system dynamics, systems thinking, and soft operations research.

3.3.2 System Dynamics and Systems Thinking

General systems theory has broadly evolved into separate schools of thought. Forrester (1994) explains the similarity and differences between system dynamics, systems thinking and soft operations research, suggesting that although all three disciplines aspire to understand and improve of systems, they use different approaches to solve problems.

3.3.2.1 System Dynamics

System dynamics has a strong relationship with mathematical modelling and computer-aided simulation techniques, using quantitative methods to understand the dynamic behaviour of complex systems (Forrester, 1994; Sterman, 2000). The essential concept of system dynamics is to recognise the system's structure and the dynamic relationships between its components. More importantly, system dynamics states that understanding the behaviour of individual components is inadequate for understanding the characteristics of the system, as the behaviour of the whole system cannot be comprehended using the observed behaviour of individual parts. Rather, the circular, interconnected, feedback, or dependent relationships between the components are important contributing factors to shape the behaviour of the whole system (Forrester, 1994; Sterman, 2000; Sterman, 2001).

System dynamics has been broadly applied to assist policy analysis and design, including the management of sustainability issues. Saysel, Barlas, and Yenigun (2002) use a system dynamics model to evaluate how key changing environmental factors (such as the use of pesticides and fertilizers) could affect the sustainability of the natural environment. Furthermore, Ostrom (2009) indicates that the predictability of system dynamics is an important input for policy development to better analyse the sustainability of social-ecological systems. Thus, although sustainability is a complex issue that covers economic, environmental, social and ecological concerns, the system dynamics approach is a useful toolkit in sustainability management due to its generalisable nature.

3.3.2.2 Systems Thinking

While the quantitative approach taken by system dynamics is an effective means to address sustainability issues, the purpose of this research is not to design and implement such a mathematical model. Rather, this research aims to apply a systems approach to the evaluation of sustainability reporting. Thus, this research will adopt the non-quantitative aspects of general system theory, that is, systems thinking, to describe the ecosystem worldview.

Checkland (1999, p.45) states the process of systems thinking is "consciously organised thinking using system ideas". It shares with system dynamics the same assumption that problem-solving process should balance integrated, holistic thinking and fragmented, reductionist thinking, achieved by understanding a system through examining the linkages and interactions between the components that comprise the entirety of the system (Checkland, 1999; Forrester, 1994; Jackson, 2003; Senge, 2006). However, different to system dynamics, systems thinking does not quantify the interaction between parts and systems.

Thus, systems thinking is more of a cognitive approach, aiming to solve problems by identifying the parts of the whole, and to comprehend how all the parts fit together to explain a phenomenon, or work collectively to achieve an intended effect (Chan, 2015). The benefit of adopting systems thinking is the capacity to enable the decision maker to solve a problem in a holistic, balanced way rather than providing a locally optimised short-term fix (Senge, 2006; Jackson, 2003; Bosch et al., 2007; Jackson, 2009; Chan, 2015)

Thus, to achieve a holistic view of sustainability issues, systems thinking should be embraced. Under the scope of systems thinking, the world is recognised as a system with its sustainability depending on the activities of a number of well-defined sub-systems and the overall stability and integrity (Martin and Hall 2002). This approach enables sustainability practitioners to focus on what should be done rather than measuring downstream impacts (Martin, 2008). Furthermore, Porter (2008) states that systems thinking could become the bridge connecting organisations' intention to achieve corporate social responsibility and actual strategic plans to realise their objectives. A lack of systems thinking could lead to unfavourable outcomes, such as the use of a reductionist approach to manage sustainability, which is not adequate to address multi-dimensional and dynamic sustainability issues (Martin, 2002; Nguyen and Bosch, 2013).

> Fundamentally, simple solutions fail because they are not holistic or creative enough. They are not holistic because they concentrate on the parts of the organization rather than on the whole. In doing so they miss the crucial interactions between the parts. They fail to recognize that optimizing the performance of one part may have consequences elsewhere that are damaging for the whole. This fault is known as "sub-optimisation" (Jackson, 2003, p.xiv).

As Jackson (2003) describes, simple solutions that give preference to local optimisation based on a reductionist approach to problems often lead to "the cure being worse than disease". Therefore, to provide adequate response to sustainability issues, a holistic approach embracing systems thinking cannot be overlooked. According to Jackson (2003), systems thinking paradigms can be deployed to reduce the potential harm caused by reductionist goal-seeking management by better exploring management purposes, ensuring fairness and promoting diversity. In turn, when dealing with complicated management problems, adopting a systems approach could help organisations to achieve higher efficiency and efficacy, better respond to environment change, and better engagement with stakeholders to explore shared purposes and mutual benefits. Systems thinking further helps organisations by avoiding routinised management, instead encouraging collective decision-making, that in turn emancipates and empowers all individuals regardless their positions in an organisation.

Wolf Totem tells stories of failure caused by sub-optimisation strategies formulated by decision-makers who rely on reductionist thinking. For instance, Bao is charged with the responsibility to boost meat production in the pasture area under his jurisdiction. His strategic approach, which clearly lacks any systems thinking considerations, is to eliminate the wolves in the local grasslands as he considers the existence of wolves to be the impediment to maintaining a larger herd of livestock. Following an efficient implementation of the strategy, including organised military hunting, trapping, and poison baiting, the population of wolves in the grasslands declines significantly, almost to extinction. However, instead of achieving the perceived benefit, Bao soon finds that the grassland ecosystem suffers from a series of unintended consequences, including the rapid increase in the hare and rodent populations, consequentially shrinking grassland and actually reducing the number of sheep. Only considering two parts of the grassland ecosystem, wolves and sheep, and reductively considering them in a causal relationship, leads to the situation described by Senge (2006) where the solution is worse than the problem itself. Failing to recognise other important parts of the system, including other animals and plants, and understanding the interrelationships between them leads to unintended consequences and, in this particular case, much more serious negative outcomes.

More interestingly, although Jiang (2008) observed that the Mongolian nomads have little knowledge about systems thinking, their cultural traditions and values actually reflecta systems thinking approach. As an example, in Chapter 16 of *Wolf Totem* Chen is told by the nomads that wolves can reduce the likelihood and severity of mosquito swarms, which is detrimental to nomadic life. Uljii explains to Chen that marmot burrows provide mosquitos a warm place to endure the cold Mongolian winter so they can reproduce quickly in summer, becoming a hazard for local human and livestock. Wolves, who are the primary marmot predator, are needed to ensure that marmots do not overpopulate and hence provide refuges for mosquitos. “The grassland is a complex place,” Uljii says. “Everything is linked, and the wolves are the major link, tied to all the others. If that link is removed, livestock raising will disappear out here” (Jiang, 2008, p.238). In a social and cultural environment where advanced technology is almost entirely absent, Mongolian nomads show a holistic understanding of the grassland ecosystem and how different parts are linked together, and teach it to newcomers such as Chen.

Although the systems approach first appeared in Western academic literature, studies in the Chinese context find that systems thinking is also found in traditional Chinese culture and philosophy (Xu, 2005). The *Yi Jing* (易经， or literally “the book of changes”), compiled in approximately 500BC, addressed the ideas of systems thinking (Luo et al, 1995). Moreover, the prevalent philosophies in ancient China, such as Taoism and Confucianism, recognised the profound link between humans and nature on both the individual and social levels (Wei and Qin, 1994). In these philosophical approaches, the development of both of humans and nature is considered as a related, harmonious, relationship and a balanced movement, summed up in the phase “Oneness of Heaven and Humanity” (天人合一， where “heaven” is taken to refer the laws of nature).

3.4 Linking Ecological Thought with Systems Thinking, and *Wolf Totem*

According to Ulrich (1993), ecological thoughts and systems thinking philosophies “appear to be nearly congruent” (p.584). Thus, this research integrates both disciplines to formulate the concept of ecosystem thinking, which will be further articulated in this research to comprehend sustainability from the perspective of ecosystem balance and harmony.

Through the discussions in this chapter, it can be seen both ecological thoughts and systems thinking can be used as problem-solving approaches to address sustainability issues and concerns. Ecological thought uses ethical or aesthetic principles to extend moral principle to include the holistic ecosystem; in contrast, systems thinking emphasises that understanding each part in a system is not equivalent to understanding the whole system. Failing to adopt a holistic view of the ecosystem leads to inappropriate human-nature relationship, causing suffering of species, imbalance, and negative feedback loops, which are detrimental to the integrity of the ecosystem.

Table 3 shows how ecological thought can be conceptually compared to systems thinking, highlighting cognitive similarities between these two schools of thoughts on three aspects: the interconnectedness between parts and the system, the holistic worldview, and the role of humans in a system. Furthermore, it links these cognitive similarities to the writing in *Wolf Totem*, and shows how these characteristics can be used to inform new understandings for sustainability.

This research connects conceptual views from the ecosystem thinking perspective (combining ecological thought and systems thinking) to scenes from *Wolf Totem*, demonstrating that the novel can be interpreted through the conceptual framework of ecosystem thinking. Such an interpretation is not only useful to provide an alternative understanding of *Wolf Totem*, but can be further applied to communicate how ecosystem thinking can be embraced to identify present weaknesses of the current concept of sustainability and the sustainability reporting practices.

As an illustration, the ecological crisis in the Inner Mongolian grasslands can be seen as the result of overlooking the interconnectedness between the different parts and the ecosystem as a whole. From the ecological perspective, the cause of the crisis can be considered as inappropriate human exploitation of natural resource capitals, which cannot be morally justified from the perspectives of ecological holism (Zhang, 2004; Dunlap, 2008; Curry 2011; Davis and Stroink, 2015). In contrast, a systems thinking perspective considers it as a methodological error, in which policymakers and enforcers fail to recognise the interrelationship between all parts of the system, which leads to reductionist-driven, short-term oriented solutions that cause long-term harmful, if unintended, consequences (Checkland, 1999; Jackson, 2003; Richmond, 1994). The integration of both ethical and methodological approaches could be used to inform a view of sustainability issues stated by Milne and Gray (2013), as the present sustainable development principle driven sustainability management and reporting is based on individual performances and lack of holistic systems considerations.

The next chapter reviews the currently adopted concept of sustainability and sustainability reporting practices to further demonstrate why ecosystem thinking can contribute to the conceptualisation of sustainability and the improvement of sustainability reporting.

Table 3: Informing Sustainability- Integrating Ecological Thought, Systems Thinking, and *Wolf Totem*

	Ecological Thought	Systems Thinking	*Wolf Totem*	Informed View on Sustainability
Interconnectedness	Human possess the ability to upset the balance of nature through anthropogenic pressures (Zhang, 2004; Dunlap, 2008; Curry 2011; Davis and Stroink, 2015)	Alterations in one area of a system necessarily affect other realms of system dynamic. A reductionist approach leads to local optimisation, causing negative consequences (Checkland, 1999; Senge, 2006; Richmond, 1994).	Negative consequences are caused by excessive herding and wolf hunting. Agricultural and industrial development affects the grassland ecosystem and lead to ecosystem crises.	Sustainability is at the level of the system, not the individuals (Milne and Gray, 2013). Hence, a TBL approach (reporting individual sustainability performance) will not provide a meaningful picture of sustainability at the system level.
Holism	Human beings are not segregated or exempted from the natural world. Human and all other biological and non-biological forms share interdependency (Zhang, 2004; Dunlap, 2008; Curry 2011)	Human beings are part of a natural system, acting as local agents within larger, complex wholes. This approach acknowledges system membership (Gardner and Stern, 2002; Davis and Stroink, 2015)	The way Mongolian nomads describe their relationship with the grassland ecosystem. As an extreme example, the way they feed the deceased to wolves as a means to give back to the system	Consideration for sustainability should be made based on a holistic view, considering ecology rather than focusing on human needs (Martin, 2008; Nuygen and Bosch, 2013).
Role of Human	Human beings will never possess the ability to control and dominate nature (Zhang, 2004; Dunlap et al., 2000; Commoner 1971)	Systems are not governed by a central authority and display emergent and spontaneous behavior based on the local interactions of agents with in the system dynamic (Walker and Salt, 2006)	Mongolian nomads portray themselves as guardians, rather than owners, of the grassland ecosystem.	Human-needs driven, economic-centric principles of sustainable development are a limited, even inappropriate, concept for sustainability (Sanchez, 2008; Milne and Gray, 2013)
Impact/Communication	Ethical and aesthetic.	Scientific and paradigmatic	Through creative narratives	Scholarship and policy

Chapter Four: Sustainability and Sustainability Reporting

> In what kind of world do you want your children, grandchildren and great-grandchildren to live? Do you want them to live in a world characterised by social harmony and social justice? Or would you be happy for them to live in a world riven by social conflict, where "justice" is only available to a few powerful and privileged member of society – with no guarantee that your descendants would be among this privileged elite? Do you want them to live in a world which has an ecological balance capable of sustaining the lives of all its inhabitants at reasonable level of comfort? Or would you be satisfied for them to live in a world where the ecosphere has been damaged to the extent that life for all but a small privileged elite is lived at the margin of existence, where weather patterns have become so extreme that severe storms regularly kill many people, the supply of food and water is highly erratic, and many species of plants, animals and insects have become extinct? Do you want them to live in an economically prosperous world? Or would you be satisfied for them to live in a world where the economy has failed and they were therefore unable to enjoy the material benefits of economic success?
>
> -Unerman, Bebbington and O'Dwyer (2007, p.1).

This chapter explores the second theoretical domain that is fundamental for this research: the concept of sustainability, and the practices of sustainability reporting that are informed by the concept itself. It compares the currently adopted definition of sustainability as expressed in sustainable development principles with the ecological perspective of sustainability to highlight why the notion of sustainable development lacks a consideration of ecology. This chapter also reviews literature concerning sustainability reporting, with a focus on Chinese firms and banks, and outlines how this research provides new insights to the body of knowledge in this domain.

4.1 Sustainability

4.1.1 Sustainable Development as the Definition of Sustainability

The commonly accepted definition of sustainability is the sustainable development principle outlined in the *Brundtland Report* as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987).

Although there is little disagreement with the above definition (Bhur, 2007), the concept of sustainable development is not without limitations. Many suggest that the definition is principle-based and therefore is open to interpretation (Redclift, 2005; Hopwood, Mellor and O’Brien, 2005; Christen and Schmidt, 2012). In addition, Bhur (2007) suggests that although the definition does integrate the environmental, the social and the economic, it lacks clarity on other important aspects such as “timeframe, justice, geography, values and use of capitals” (p.57). Thus, different discursive interpretations of the sustainable development principle may cause conflicts in policy-making concerning sustainability issues due to the arbitrariness of the definition (Mitcham, 1995; Mebratu, 1998; Robinson, 2004; Laine, 2005; Waas et al., 2011). More importantly, as a serious concerns outlined by Milne and Gray (2013), business could adopt a wrong agenda due to misinterpreted sustainability, and cause harm, not benefit, to an ecologically sustainable future.

A key notion of sustainable development is intergenerational equity, and, more specifically, the preservation (or non-decline) of the world’s resources, natural capital stocks, and ecosystem resilience, for the needs of future generations (Padilla, 2002). Toman (2006, pp.247-248) suggests that two other key components of the definition for sustainability should be considered in addition to intergenerational equity (respect for the interests of descendants): a specification of what is to be sustained, and a measurement of human impact relative to global carrying capacity.

Basiago (1995) outlines that sustainability can be described using different values embraced by different interest groups. For instance, a biologist's definition of sustainability emphasises biodiversity, suggesting that human urbanisation and its impact on ecosystems could threaten the preservation of natural capitals for future generations. In comparison, an environmental ethicist's view of sustainability ponders whether nature has its own rights and whether the extinction of species caused by humanity can be ethically justified. Thus, the concept of sustainability cannot be precisely defined. However, as Basiago (1995) suggests, the concept should incorporate values of global environmentalism and biodiversity in addition to the intergenerational-equity principle.

Different interpretations of the definition of sustainability, and the important conceptual components these interpretations incorporate, can be used as criteria to assess whether certain human activities are defensible from the perspective of sustainability. Basiago (1995, p.118) provides some illustrative applications, and finds that if the components of sustainability are broadly defined, it could be difficult to align human activities with them[8].

4.1.2 Strong Sustainability vs. Weak Sustainability

Neumayer (2003, p.1) describes two economic paradigms of sustainable development that can be used to evaluate sustainability: "strong sustainability" and

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[8] A particular example provided by Basiago (1995) is a sustainability analysis to evaluate Western nations' food aid to famine victims in the Sahel. The author suggests that although the food-aid initiative does satisfy the intergenerational-equity criteria, from the perspective of global environmentalism and biodiversity it is not defensible, as it helps to sustain communities engaged in ecologically destructive practices and causes a net loss of biodiversity.

"weak sustainability". This distinction addresses the concerns raised by Toman (2006) of how to measure what is to be sustained, and, whether all capitals (natural endowment, physical, social and human) are fungible or substitutable.

As Neumayer (2003) indicated, the concept of weak sustainability is based on Hartwick's work regarding the Principle of Investing Resource Rents (*Hartwick's Rule*). Hartwick (1977) suggests that, to prevent falling living standards due to the depletion of non-renewable natural resources, investment in produced capitals (both physical and human) need to at least offset the decrements in these resources. However, this principle is developed based on the assumption that produced capitals are appropriate substitutes for natural resources (Solow, 1986). This substitution of human-made capital in place of diminishing natural capital relates to a weak definition of sustainability (Pearce and Atkinson, 1993; Gutes, 1996; Gowdy and McDaniel, 1999; Neumayer, 2003; Hansson, 2010). Toman (2006, p.249) further explains: if substitution between all kinds of capitals is considered as possible and acceptable, the concept of sustainability will tolerate damage to ecosystems and extinction of natural resources so long as compensatory investments in the forms of other capital can be provided for future generations. Hence, pursuing a narrowly defined sustainability justifies exploitation of nature and moves the society further from, rather than closer to, ecological harmony.

In contrast, Neumayer (2003) suggests that, although the concept of strong sustainability is more difficult to define, the essence of the concept is to recognise that natural capital is non-substitutable. Thus, the weak definition was built on the assumption that natural resources can be substituted for human-made capital, while the strong definition insists that those two are complements rather than substitutes

(Beckerman, 1995; Aryes, van den Berrgh and Gowdy, 2001; Boos and Holm-Muller, 2012). In an extreme version, Seidler (2009) suggests that to achieve strong sustainability, every kind of natural resource (including all species of life forms and non-life forms) should be preserved regardless of whether they can be replaced by something else. As Nuemayer (2003, p.7) concludes, neither weak nor strong sustainability is falsifiable; rather, both paradigms embrace the definition of sustainable development to provide non-declining utility for infinity. However, there are remaining questions as to whether either of these concepts can be measured in practice and whether their implications can be underpinned.

Wolf Totem contains many narratives that can be analysed by framing contrasting views between weak and strong concepts of sustainability. In Chapter 18 of the novel, Chen Zhen witnesses a heated debate between the official leader of the settlers, Bao, and a Mongolian nomad and formal tribal leader, Uljii, regarding whether a reclamation project should be initiated in the Mongolia grasslands. Bao, who is originally from an agricultural region, insists that agricultural development could benefit both local Mongols and citizens in other regions in China, suggesting that "in terms of size, [the pasture] is the equivalent of a whole county down south, and a population of a thousand people is less than one of our villages. That's incredibly wasteful. In order to create the greatest wealth for the party and the nation, we must bring an end to this backward, primitive nomadic way of life" (Jiang, 2008, p.255). Uljii then states that such an attempt will only lead to the decay of Mongolian grassland, as the nomadic system is the only way to preserve the ecological balance of the grasslands.

Viewed in terms of the concept of sustainability, the future Bao projects is development-driven, suggesting that the extra capital produced through agricultural activities can compensate for the loss of natural and environmental resources in the grasslands. Based on this criterion, Bao's grassland management philosophy aligns with a weak version of sustainability. Although it appears that the Mongolian nomads' quality of living can be improved through shifting from nomadic herding to an agricultural economy, such an arrangement overlooks the integrity of the grassland ecosystem and the loss of social capital due to lifestyle change. As *Wolf Totem*'s story reveals, such short-sightedness does eventually lead to severe environmental degradation and diminishing nomadic culture. A similar story was observed in Purdon (2013), in which the author considered a weak-sustainability-driven land-acquisition project in Tanzania to be unfair for local villagers, as the monetary compensation was insufficient to offset the loss of village land that introduced the risk of food insecurity.

The story also tells another important lesson. Although from an ecology perspective, embracing a weak sustainability concept in management can be harmful for ecosystem balance and integrity. Political and institutional powers could force management to make this choice. Due to his position, Bao is responsible for ensuring the pasture area under his management meets the political requirement of continuously supplying food to other regions. The political pressure on Bao motivates him to seek new ways of improving output, knowing that the grasslands are already carrying their full capacity of livestock. Thus, the main problem is not whether Bao (as a representation of management) should consider strong sustainability concepts when making decisions; rather, he must fulfil a development-oriented goal due to powerful external pressures. This is particularly relevant in *Wolf Totem,* which is set in the chaotic period of the Cultural Revolution, when agricultural production was significantly disrupted due to Mao Zedong's ideological vision for China, resulting in significant food shortages (Clark, 2008). In this particular context, Bao's options are limited. Thus, in essence, Bao's story in Chapter 18 of *Wolf Totem* portrays an understanding which can be used to comprehend sustainability management in the modern context: that external conditions can fundamentally affect a manager's decision-making among different priorities within the broader concept of sustainability.

4.1.3 Sustainable Development vs. Eco-sustainability

This research also compares sustainability and ecological sustainability (or eco-sustainability) to investigate the definition of sustainable development and their difference from an ethical perspective. The term "ecological sustainability" (or "ecologically sustainable development")[9] is defined by Shrivastava (1995, p.938) as "people behind economic development who are conscious of limits of the natural environment to support growth". More specifically, this concept aims to protect the diversity and richness of natural resources, and to argue that populations' consumption of natural resources must employ principles of conservation. Thus, compared to economic paradigms of weak or strong sustainability, the concept of eco-sustainability focuses more on defining an appropriate manner for human appropriation of natural resources, rather than arguing whether natural capitals can be substituted.

[9] These two terms have been used interchangeably in Shrivastava (1995) as well as in Termorshuizen and Opdam (2009).

Another concept of eco-sustainability provided by the Australian Conservation Foundation (n.d.): “[W]e recognise that every form of life has value regardless of its worth to human beings, and the need to protect and restore the integrity of our ecological systems, with special concern for biological diversity and the natural process that sustain life, while at the same time providing for social and economic justice.” As this statement shows, values such as ecological ethics and aesthetics are embedded in the concept of eco-sustainability.

The concept of eco-sustainability provides an alternative to the principle of sustainable development, displaying contrasting considerations of some of the criticised shortcomings of sustainable development, including: the overemphasis on development and process (Shrivastava, 1995; Martinez-Alier et al., 2010); promoting an anthropocentric view and emphasising humans’ capacity to control and manage ecological resources (Redclift, 2005); lacking consideration for local communities (Robinson, 2008); lacking consideration for social justice (Pezzoli, 1997); causing ecological degradation and inequality in economic opportunities (Sneddon, Howarth and Norgaard, 2006); as well as appropriating technical fixes, using a technology-natural resource transfer to justify overconsumption of natural resources (Robinson, 2004; Castro, 2004). Table 4 summarise this researcher’s view of how the concept of ecological-sustainability addresses criticisms of sustainable development.

Table 4: Comparison between the Principles of Eco-Sustainability and Sustainable Development

	Eco-Sustainability	Sustainable Development
Ontological belief	Anti-anthropocentrism	Anthropocentrism
Worldview	Ecology-centric	Economic-centric
Role of humans	Guardian of natural capital	Owner of natural capital
Relationship with non-human species	Embracing rights of plants and animals	Humans have supreme dominance
Objective	Preserve natural capital	Prioritise economic development
Views on the environment and development	Fast pace of economic development exceeds the carrying capacity of the environment	Speed of economic development can be maintained with established policies to protect the environment

As Table 4 shows, the concept of eco-sustainability, which contains values often embraced in ecological thought and communicated in nature writing, is different to sustainable development in a number of ethical dimensions (Krotscheck, 1997; Branzei, Vertinsky and Zietsma, 2000; Bosselmann, 2008; Jiang, 2009). Compared to the anthropocentric, economic and development-driven concept of sustainable development, eco-sustainability prioritises ecological integrity and diversity, considers that every kind of species has its own rights, and more importantly emphasises natural resource scarcity rather than disregarding natural-resource exhaustion as a false prediction[10].

[10] Milne and Gray (2013, p.15) state, "History shows a series of false predictions about resource exhaustion and whether the end of the world is nigh" and point to Malthus (1798) and Jevons (1865). In contrast, Turner and Alexander (2014) suggest that the concept of Limits to Growth was right, and that new research evidence shows a collapse is near.

The contrast between eco-sustainability and sustainable development has also been observed in *Wolf Totem,* particularly in the difference between Mongolian cultural values and how the intruders treat the grassland ecosystem. In Chapter 32 of the novel, the protagonist Chen is forced to act as hunting guide for Bao and a team of visiting military officers who are interested in hunting wolves and need a local guide, yet all the Mongolians refuse to help. Chen, who has developed a strong emotional relationship with the nomad culture and the grassland ecosystem, continually tries to convince Bao and the others that hunting wolves could be detrimental for the grassland, while they considered Chen's logic to be nonsense.

For example, a dialogue between Chen and the others debates the function of wolves in governing the number of grass-eating animals and protecting the grasslands (Jiang, 2008, pp.449-450):

Xu, a visiting Chinese military officer, explains to Chen why he does not think wolves are needed:

> "Granted, wolves make a contribution to the grassland by killing rabbits, mice, gazelles and marmot. But that's a primitive way to go about it. We live in an age when man-made satellites soar into space. We can protect the grassland with scientific methods. The crops will be sending crop dusters to eradicate the mice".

Chen strongly disagrees, but his opinions are mocked by others:

> "No, you can't do that", he said, "If the wolves, foxes, desert foxes and hawks eat the dead mice, they all die off."
>
> "What's the use of having wolves if all the mice are dead?" Bao said.
>
> "Wolves have lots of uses," Chen argued. "I am trying to make you understand wolves can reduce the number of gazelles, rabbits and marmots."
>
> Old Liu[11], his face red from the liquor, burst out laughing. "Gazelles, wild rabbits, and marmots are all famous game. They won't be enough for our people when they come, and there definitely won't be any left for wolves".

[11] A visiting militant soldier and vehicle driver for the hunting team.

These excerpts show a very different way of thinking between Chen and the others in relation to the value of animals in the Inner Mongolian grassland ecosystem. Influenced by nomadic tradition, Chen understands why these animals are important for the ecosystem balance; the visitors, who have little knowledge about the grassland, reduce all animals into food or game for hunting. It is quite clear that the visitors' view is more anthropocentric and technology-driven, as they argue that advanced technologies can replace the role of natural species, and hence the extinction of these species can be justified. The ecological crisis depicted at the end of *Wolf Totem* shows that such views lead to severe negative consequences. This story further shows the danger of overemphasising technology-driven development and overlooking ecological balance.

4.1.4 Triple Bottom Line

This research also pays attention to the accounting framework Triple Bottom Line (TBL), as it has been misused as a metaphor for sustainability (Milne and Gray, 2013), and hence causing unintended negative consequences on sustainability management and reporting (Milne and Byrch, 2011; Milne and Gray, 2013). This section provides a discussion on why a TBL approach does not adequately consider all aspects of ecological balance.

Elkinton coined the term TBL in 1994. It became an influential idea in many areas in relation to sustainability, including sustainability management, education and reporting (Jeurissen, 2000; Norman and MacDonald, 2004; Lamberton, 2005; Milne and Byrch, 2011, Milne and Gray, 2013). Hopwood, Unerman and Fries (2010, p.40) underline that all the three pillars of Triple Bottom Line are a necessity for durable sustainability:

> Economic sustainability provides us with future income and resources. Environmental sustainability provides a stable ecosphere that supports and protects life, including the provision of food and water. Social sustainability provides well-functioning societies that protect and enhance quality of life and safeguard human rights.

Although Elkinton himself readily acknowledges that TBL and sustainability are very different (Buhr, 2007), the framework has become a guideline for reporting corporate social responsibility (CSR) for both business and not-for-profit organisations, and a de facto standard for sustainability reporting (Norman and MacDonald, 2004; Painter-Morland, 2006). TBL remains an essential influence shaping the development of sustainability reporting frameworks including the Global Reporting Initiative (GRI)[12]. According to Buhr (2007), sustainability reporting has developed slightly since TBL, however, “whether a more meaningful sustainability reporting can be produced remains to be seen” (p. 61).

Milne and Gray (2013) provide a critique of TBL as the root cause for businesses embracing a “business-as-usual” approach in sustainability reporting and sidelining real concern for ecology (p.13). Furthermore, they consider the dominance of the GRI framework and the TBL approach in businesses’ sustainability reporting as unlikely to promote ecological thinking and literacy. In particular, Milne and Gray (2013) consider that the measurement of eco-efficiency, an indicator often used by businesses to disclose their sustainability performances, will lead to legitimisation firms’ ecologically harmful activities and cause unsustainability: “It presents little more than an illusion of change. Relying on eco-efficiency to save the environment

[12] John Elkington is the present Chairman of the GRI Technology Consortium, which aim of convening the world’s technology leaders to promote a conversation about how sustainability data and information can transform both business and policy decision making (GRI, n.d.).

will in fact do the opposite - it will let industry finish off everything quietly, persistently and completely" (McDonough and Braungart, 1998, p.4, as cited in Milne and Gray, 2013). Thus, the TBL approach can be considered to be widely misused in understanding and reporting sustainability, as the three elements are in fact not mutually supportive and make it impossible to obtain equal achievement in social, environmental, and economic aspects (Norman and MacDonald, 2004).

The trade-off between the three pillars of TBL is important suggests that the assumption that economic development and environmental preservation can be achieved mutually (if properly governed and managed) is not always possible. There are numerous reports and critiques of the observed environmental degradation during the process of economic development in developing countries (Stern, Common and Barbier, 1996; Tamazian, Chousa and Vadlamannati, 2009; Pearce, Barbier and Markandya, 2013).Some suggest that such a trade-off is necessary, and indeed acceptable if economic development is the national or regional priority, and provided that the environmental damage can be properly administered and effectively managed (Den Butter and Verbruggen, 1994; Feiock and Stream, 2001; Figge and Hahn, 2012). However, as the story of *Wolf Totem* and the present Mongolian grassland ecology crises demonstrate, the harmful effects on the environment caused by economic development can be so severe, that the entire ecosystem can be destroyed, forcefully changing the lifestyle and wellbeing of all human and non-human species attached to the ecosystem.

4.2 Sustainability Reporting

The concept of sustainability, and the way businesses understand it, shape the process of corporate sustainability reporting[13] (Gray and Milne, 2002; Adams and McNicholas, 2007; Gray, 2010; Milne and Gray, 2013). Schaltegger, Bennett and Burritt (2006) state that businesses communicate corporate sustainability through sustainability reporting, which can be viewed as "the results of management approaches to tackle challenging issues posed by the need for corporations to move towards the goal of sustainability" (p.2). The following section provides a review of the literature concerning firms' practices of sustainability reporting, particularly in the banking sector and in the context of China.

4.2.1 Theoretical Frameworks for Sustainability Reporting

The number of companies producing sustainability reports has risen steadily since the emergence of sustainability reporting as a practice (Milne and Gray, 2007). According to Deegan (2014), corporate provision of sustainability reporting is mostly unregulated and voluntary. A number of system-oriented theories (legitimacy theory, stakeholder theory and institutional theory) have been developed by different researchers "to explain managers' motivations to make non-financial disclosures" (Deegan, 2014, p.340).

Based on these theories, research on sustainability reporting often regards the practice as a means for businesses to realise certain managerial objectives, including: seeking social acceptance and accessing legitimacy (Guthrie and Parker, 1989; O'Donovan, 2002; Deegan, 2014; Castello and Lozano, 2011; Williams and Adams, 2013; Chu, Chatterjee and Brown, 2013); maintaining and enhancing the relationship

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[13] The term *sustainability report* used in this research includes, but is not limited to, corporate responsibility reports, stakeholder impact reports, social and environmental impact reports.

between the organisation and its stakeholders (Roberts, 1992; Sweeney and Coughlan, 2008; Gray, Owen and Adams, 2010); or adopting an organisational form that is institutionalised within the society (Larrinaga-Gonzalez, 2007; Laine, 2005). By embracing these theories, a business organisation positions itself as part of a broader social system. Its sustainability report can then be considered as a vehicle for the business to communicate its impact on, and how it responds to the influence of, other components of the social system (Deegan, 2014, p.341).

In addition, studies have also found that companies' sustainability reports are associated with various firm attributes. Adams (2002) provides a comprehensive review on how corporate characteristics, general contextual factors, and internal contextual factors affect the content of sustainability reports. Among a vast list of variables and established correlations[14], two arguments are further investigated in this research: the company's country of origin, which influences the nature and extent of disclosure, and the relationship between the cultural context, ethical relativism, and reporting (Adams, 2002, p.227).

Thus, this research will investigate how the unique national and cultural context of China influences Chinese firms' sustainability reporting, and provide insights to complement Adams's (2002) findings which were based on firms in the United States and Europe.

Gallo and Christensen (2011) find that firm size, ownership structure and industry membership are strongly related to the disclosure of sustainability performances. Large businesses with diversified ownerships that operate in industries that involve high environmental risk tend to provide more disclosure on sustainability

[14] For detail, see Adams (2002, p.225-229).

performance. In addition, Belkaoui and Karpik (1989) suggest that firms' existing perceived social performance and political visibility are positive influences on their disclosure of social information. This research's investigation of Chinese banks' sustainability reporting allows an examination of these established relationships in a new context, identifying similarities or differences.

Adams and Narayanan (2007, p.70) state that the growing phenomenon of corporate sustainability reporting, and the growing public demand for sustainability information, indicate that sustainability reporting should no longer be considered a platform for businesses to deal with sustainability issues at "surface level"; rather, companies need to substantively "incorporate sustainable practices into business operations". This implies that the provision of sustainability reports provides no guarantee that businesses are operating in a sustainable way. Sustainability report can be used as means merely to manage reputational risks and public impressions[15] (Neu, Warsame and Pedwell, 1998; Bebbington, Larrinaga and Moneva, 2008). This understanding also prompts this researcher to consider factors such as reputational risks when evaluating Chinese banks' sustainability disclosures[16].

4.2.2 Sustainability Reporting in China

Despite having a much shorter history, sustainability reporting in China has started to gain momentum since 2006 (KPMG, 2011; Marquis and Qian, 2013; Noronha et al., 2013). According to KPMG (2011), more than sixty percent of large Chinese

[15] Deegan (2014) considers that this understanding is very little different to the concept of legitimacy.

[16] As the scope of this research is to comprehend the sustainability reporting practices adopted by Chinese banks, rather than to evaluate whether these banks are undertaking substantive structural change or are merely managing impressions, it does not directly question the integrity of the content included in the reports. Commentaries, however, will be provided on the observable findings.

companies have adopted sustainability reporting practices[17], making China one of fast followers in the developing and emerging markets in embracing sustainability reporting.

Studies on sustainability reporting in China have identified the influence of political intervention on Chinese firms' sustainability management and reporting (Kolk, Hong and Van Dolen, 2010; Noronha et al., 2013; Marquis and Qian, 2013). The Chinese government has been recognised as the key driver to promote sustainability and sustainability reporting in China, by frequently signalling to the market that corporate social responsibility (CSR) is an appropriate and desired activity (Marquis and Qian, 2013). Furthermore, Noronha et al. (2013) identify that in addition to the state government, other government agencies, the Shanghai and Shenzhen stock exchanges, and non-governmental organisations have all been pushing the concept of sustainability to raise more awareness in Chinese business firms. More importantly, regulations and policy guidelines have been developed and issued by various regulatory bodies to encourage and standardise sustainability reporting by Chinese firms, thus making sustainability reporting practice in China to some extent mandatory.

Informed by institutional theory, Marquis and Qian (2013) emphasise that the important government-firm relationship in China increases institutional pressure for Chinese firms to adopt similar practices in sustainability reporting as a means of decoupling. However, they also state that the level of institutional pressure is not solely determined by state ownership, as private firms are also likely to follow the

[17]This includes both providing sustainability information in annual reports and issuing standalone sustainability reports.

government’s guidance. This suggests that Chinese businesses, regardless of ownership, have a certain level of political dependence, and hence are potentially less flexible in sustainability management and reporting practices. This provides a contrasting view to the Western perception that sustainability is unregulated and voluntary (Deegan, 2014). Hence, this research’s focus on the Chinese context can potentially complement Western understanding of sustainability and sustainability reporting.

As one of the recognised influential non-government organisations in the field of sustainability reporting in China, SynDao Sustainability Solutions has actively studied Chinese firms’ sustainability reports since 2007. Based on analysis of sustainability reports issued by 26 Chinese enterprises and interviews with their executives, SynDao (2007) identifies key drivers for Chinese firms to report sustainability performances. Their findings are comparable to the the results reported in the MIT sustainability survey of world firms (Berns et al., 2009), as shown in Figure 1 and 2 below.

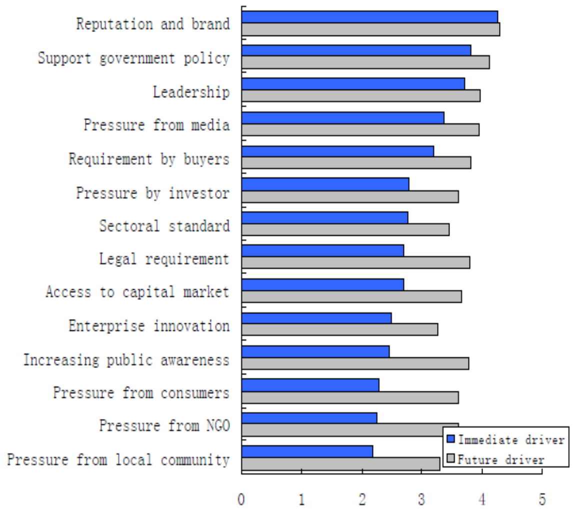

Figure 1: Drivers for Chinese firms to report sustainability (SynDao, 2007, p.15)

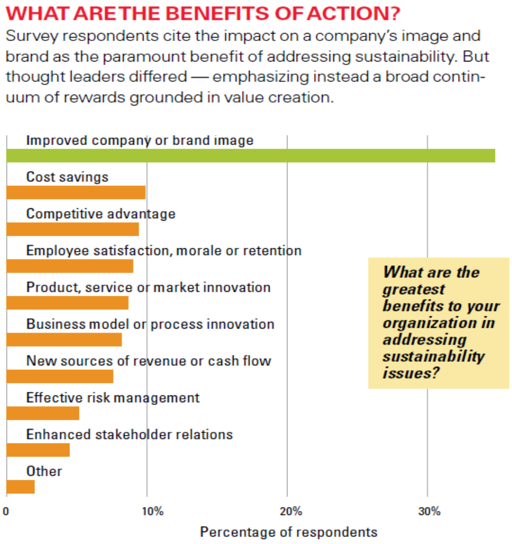

Figure 2: Drivers for Worlds' businesses to report sustainability (Berns et al., 2009, p.19)

As seen in this comparison in Figure 1 and 2, company reputation and brand image are considered the most important drivers for sustainability reporting in both studies. However, the Chinese firms address other driving forces quite differently, not considering cost saving important. Instead, they focus on conforming to pressures from varies stakeholder groups, in contrast to the leading firms in the world, which consider addressing sustainability as an effective means to boost innovations and achieve better management efficiency.

The difference between Chinese and Western concepts of sustainability and its practice is further investigated by Kolk, Hong and Van Dolen(2010), who compare the sustainability disclosures made by domestic and foreign retailers in China. Their findings suggest that Chinese domestic firms provide more disclosures in relation to economic performance and philanthropic spending, while international firms address product responsibility and labour issues to a greater extent. Tang and Li (2009) identify consistent findings that Chinese firms often practice philanthropy as part their sustainability commitment. They note in particular that Chinese firms have broadly embraced both short-term, event-based philanthropy (donations and sponsorships) and long-term philanthropy (building foundation and establishing ongoing partnerships) to show that they are committed to contributing to the general social welfare. This, however, raises a concern as to whether Chinese businesses consider that philanthropy spending is equal to being responsible.

4.2.3 Sustainability Reporting by Banks

The banking sector holds an interesting position in the domain of sustainability development. It has very minimal direct impact on environmental sustainability compared to manufacturing industries. Yet it has a significant role and vast indirect impact on economic development and financing of projects that may have direct negative environmental impacts (Weber, 2005; Weber, Scholz and Michalik, 2010; Conley and Williams, 2011; Castelo, 2013). Compared to available literature on sustainability reporting that focuses on heavy industrial sectors (for example, see: Hogner, 1982; Guthrie and Parker, 1989; Deegan, 2002; Laine, 2004) or those that consider a variety mixture of industrial sectors (see Hackston and Milne, 1996; Tsang, 1998; Labuschagne, Brent and Van Erck, 2003), research with a clear focus on the banking sector's sustainability reports remains thin.

Coupland (2006) considers that the disclosure of social and environmental performance by banks is the currency in the banking sector, and defines the bank's responsibility in three categories: doing good (such as charity engagement and financial inclusion); being good (such as reducing emissions and energy consumption); and funding good (not providing funds to borrowers in undesirable categories such as firearms dealers). This provides a useful construction of the definition of sustainability performance in the banking sector. Coupland (2006) found that even though banks have a much lower energy consumption compared to those heavy industries, the disclosure on such indicators remains an important part of their sustainability reports.

What is unique to the banking sector is its emphasis on responsible lending (such as adoption of the *Equator Principles*), which has been recognised as a central element used in legitimisation (O'Sullivan and O'Dwyer, 2009). Hui and Bowrey (2008) find rather differently: that adopting the *Equator Principles* may potentially hinder the legitimisation efforts of a bank operating in China, as the immediate economic impacts on the community would be considered far more important than these "grand objectives" (p.14). Despite these opposing views, Conley and Williams (2011) further suggest that by participating in the development of the *Equator Principles*, global banks have the potential to shape the landscape of sustainability reporting by financial institutions, leading to a higher degree of institutionalisation and standardisation.

Using content analysis of sustainability reports, Scholtens (2009) evaluates the sustainability performance of 32 banks from 15 countries including North America, the Pacific-Asia (Australia and Japan) region, and Europe from 2000 to 2006, and determines the regional difference to be insignificant. This finding further demonstrates the level of institutionalisation in banks' sustainability reports, especially in Western countries. This research's focus on Chinese banks could provide additional input to identify whether Chinese banks' sustainability management and reporting are also under the influence of global institutional mechanisms.

Australian banks, especially the “Four Pillars” (ANZ Bank, Commonwealth Bank, National Bank of Australia and Westpac Bank), have been regarded as pioneers in sustainability management and reporting, receiving numerous awards and recognition (Boersma, 2015). Studies on Australian banks’ find that sustainability reporting has been used as a legitimisation device (Do, Tilt and Tilling, 2007), as well as a means of communicating strategic change management (Baxter, Chua and Strong, 2010; Huang, Pepper and Bowrey, 2011).

In the context of developing economies, a study of Bangladeshi commercial banks found that depositors and borrowers constituted a large and diverse group of stakeholders and had higher stakes in banks’ performance than did customers of other industrial firms (Khan, 2010). Corporate governance disclosure is an essential element of sustainability reporting by Bangladeshi banks, as shown by Khan (2010). However, the relevance of corporate governance to organisation sustainability may look quite different in China, where the majority of Chinese state-owned enterprises (including banks) lack a diversified board of directors and are criticised for dysfunctional corporate governance (Young et al., 2008).

This research contributes to the literature on sustainability reporting by providing a comparative study focused on the Chinese context, where state ownership, national culture, current regulation and corporate governance practices all add complexities to Chinese banks’ sustainability development and disclosures. By doing so, this research furthers academic understanding of the concept and practice of sustainability in the unique context of the Chinese banking sector, which has been less closely examined in research in this domain.

Chapter Five: Metaphor

> In addition to making use of the concrete to aid our understanding of the abstract, metaphors, it has been argued, provide a basis for uncovering perceptions, attitudes and feelings which until released by metaphor were previously subconscious or inarticulated.
>
> - Oswick and Montgomery(1999, p.519).

> Metaphors work by helping us to draw out and highlight particular features of interest to produce different understandings than existed before. However, even as metaphors highlight certain features, they inevitably ignore others. Consequently, no metaphor (no matter how useful) can encompass the totality of the object of interest (Geary, 2012, p.177). Metaphors are always partial and, therefore, always incomplete. This partiality, this incompleteness, also contributes to the importance of according greater attentions to the metaphors we use in practice, research, and teaching.
>
> - Young (2013, p.881).

Chapter Four outlined that current sustainable development principles highly favour economic-oriented considerations and sideline ecological values. As shown in the story of *Wolf Totem* and the examples of environmental and ecological degradation caused by human-need driven economic development [18], imbalance between economic development and ecology preservation could jeopardise societies' pursuit of a sustainable future. If this economic-oriented philosophy is embraced to manage and report sustainability, ecology integrity and diversity will not be preserved (Milne and Gray, 2013). To address this problem, there is a need to elaborate the value of ecosystem thinking when communicating and promoting sustainability, and thereby improve sustainability management and reporting practices.

This research aims to do so by imposing a new metaphor, "Wolf Totem", to describe a different concept of sustainability, which emphasises ecosystem balance and

[18] For example, China's smog issue that has attracted significant public concern (see: Ferris, 2015; BBC News, 2015).

harmony. The reason this research chooses metaphor as a means to achieve this objective is the power of metaphor to "unravel multiple patterns of significance and their interrelations" (Morgan, 1986, p.342). Thus, this chapter reviews the function of metaphor and use of metaphor to comprehend sustainability, and explains how the "Wolf Totem" metaphor can defamiliarise current understandings of sustainability and sustainability reporting practices.

5.1 Overview of Metaphor

A metaphor is defined as "a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable" (Oxford Dictionary, 2013). It is an application of analogy, using rhetorical language to address the association, comparison or resemblance between two objects (Richards, 1965). However, unlike rhetoric, which is used to "detract from or hide the reality of a situation" (Young, 2003, p.623), metaphors focus on addressing the cognitive or conceptual similarities between the metaphor and the reality of the situation that the metaphor is describing (Vevaeke and Kennedy, 1996). Ricoeur (1979) concludes that metaphor is the intersection of poetics and rhetoric, where the words used (as metaphors) must be well considered with reference to the whole field of language expression.

Metaphors "play significant roles in any discipline" (Boyd, 1979, p.357). People are accustomed to the everyday practice of using different metaphors (Lakoff and Johnson, 1980). The application of metaphor enables the writer to communicate an idea that is difficult to represent in literal language (Carter, 1990). In different areas of business research where complex issues are addressed (for example organisational management), the use of metaphor is frequently observed (Rhodes, 1984; Cleary and Parckard, 1992; Hunt and Menon, 1995; Bolman and Deal, 2003; Robbins and Coulter, 2010). Larson (2011) indicates that metaphors are more than linguistic devices; rather, they are a conceptual mapping between an abstract idea and an individual's experiential realms. As a result, authors' application of metaphor in their discourses is highly interpretative and likely to be shaped by their own value and experiences (Young, 2013). As Lakoff and Johson (1980) state, metaphors are constructions of enriched human experiences and emotions and serve as the foundation of human cognitive activities; they can be considered important tools for human life and learning.

5.2 Metaphor in Accounting and Business Discourse

Walters-York (1996) highlights the important (yet less well recognised) role of metaphor in accounting discourse. For example, she notes that "it may serve to defamiliarise accounting practices and force us to reconceive that which the ordinary and routine would allow us to pass over without question" (p.45). Tinker (1986) outlines the underpinning philosophical assumptions of the application of metaphor by stating that metaphor can never become a "natural representation of social affairs"; rather, it may "either bias or enlighten" (p.378). Moreover, he states that application of metaphors potentially enables the user to "manipulate the social imagination by reifying social relationships" (Tinker, 1986, p.378). Therefore, metaphors used in accounting discourse are inherently infused with the users' social or political values.

For example, Klamer and McCloskey (1992) considered accounting as a metaphor for economics and the bourgeois class. Morgan (1988) suggested that different metaphors of accounting (e.g. accounting as history, economics or science) have led to the development of accounting theory. Young (2001) found that metaphors can be effectively applied in professional text such as accounting standards, because they help the message-sender to construct perceptions and guide actions in an intended manner. Therefore, the use of metaphor facilitates the social construction of perceptions. In a later development, Walters and Young (2008) argued that the benefit of using a metaphor lies within its capability to help conceptualise abstract and complex notions such as human emotions and social relationships. Young (2013) concludes that metaphors pervade accounting practice and research by enabling understanding of matters and concerns through metaphorical lenses, hence the use of a variety of metaphors could help improve understandings of accounting.

Walters-York (1996) states that a major benefit of using metaphors in accounting discourse is that "metaphor contributes to the fluidity of meanings in an accounting text by situating the text closer to experience aesthetically, cognitively and pragmatically" (p.54). Hence, the use of metaphor can potentially change the perceptions people have of accounting discourse as boring and dry (for example, see: Fisher and Murphy, 1995; Walters-York, 1996; Marriott and Marriot, 2003; Byrne and Willis, 2005; Jeacle, 2008). Leung and Cooper (2003) used the fictional characters in *Alice in Wonderland* as metaphors for corporate CEOs, regulators, and auditors to explain corporate greed and its impact on auditor professionalism and independence. Similarly, Page and Spira (1999) used Meccano and underwear as metaphors for describing the *Conceptual Framework* of accounting. Hines (1992) imposed Yin and Yang as contrasting metaphors to compare mainstream and alternative accounting research, and to argue that balance between them is necessary. These applications of metaphor add different perspectives to understanding accounting discourses while attempting to construct perceptions as per authors' intentions. Arguably, using appealing metaphors in discourse enables authors to communicate complex concepts in a more learnable, understandable, and memorable way, which in turn enhances readers' ability to access the concepts and ideas that authors aim to promote (Davidson, 1978; Marcus, 1993; Golden-Biddle and Locke, 1993). Hence, with the aim of enhancing "the pleasure of readers" (Walter-Yorks, 1996, p.46), the use of metaphor can be an important technique in discussions of accounting discourse.

Compared to accounting research, application of metaphors in organisational research is pervasive (for example, see Tsoukas, 1991; Clegg and Gray, 1996; Humpherys, Ucbasaran and Lockett, 2012; Kram, Wasserman and Yip, 2012; Cassell and Bishop, 2014). Many studies focus on metaphor's role of sense-making or sense-giving in an organisational context (Morgan, 1988; Gioia et al., 1994; Boyce, 1995; Hill and Levenhagen, 1995; Jacobs and Heracleous, 2006; Boxenbaum and Rouleau, 2011; Maitlis and Christianson, 2014), and how metaphors are used to generate new organisational theory and clarify alternative schools of thought (Bacharach, 1989; Nonaka, 1994; Oswick, Putnam, and Keenoy, 2004; Boxenbaum and Rouleau, 2011). As one of the main tropes used in organisational discourse, metaphors can be used to impose or expose resonance (Oswick, Putnam, and Keenoy, 2004). The value of metaphor in creating organisational knowledge lies within the level of abstractions associated when applying the metaphor (Tsoukas, 1993). Organisational research has also identified that managers often create, control, or replace metaphors in their organisation to achieve certain management goals, including facilitating organisational change (Palmer and Dunford, 1996; Seel, 2000; Heracleous and Barrett, 2001; Seidel and O'Mahony, 2014); motivating the workforce (Haslam, Postmes and Ellemers, 2003; Cornelissen, Kafouros and Lock, 2005); and communicating visions and missions (Oswick, Putnam, and Keenoy, 2004, McManus, 2008).

The key argument for metaphors' relevance in organisational research is that the application of metaphor enables the mapping of meanings from non-organisational domains (such as mechanics, politics and biology) onto organisational structures and dynamics (Morgan, 2006). Different metaphors provide not only different insights and understanding of what an organisation is or could be, but also conceptual building blocks for the development of organisation theory (Bolman and Deal, 2006; Cornelissen and Kafouros, 2008).

5.3 Metaphor and Sustainability

In the field of sustainability research, authors have used various metaphors to promote different concept of sustainability (for example, see: Brown, Marshall and Dillard, 2006; Milne, Kearins and Walton, 2006; Leonard, 2008; Princeton, 2010; Carpenter et al., 2001; Carew and Mitchell, 2006; Auderbrand, 2010; Milne and Brych, 2011, Milne and Gray, 2013). This section reviews and evaluates some of the metaphors used, and discusses how "Wolf Totem" as a metaphor will be imposed by this research to provide some alternative views. Table 5 provides a brief summary of sustainability metaphors and how authors use them to promote different concepts of sustainability.

Carew and Mitchell (2006) explicate and describe four alternative metaphors (weaving, guarding, trading, observing limits) and conclude that each metaphor has different underpinning assumptions and communicates different important aspects of the phenomenon of sustainability. Princeton (2010) compares and evaluates metaphors for the environment from an industrial-order perspective (e.g. machine, laboratory, store) and from an ecology perspective (e.g. spaceship, scale, tide) to highlight that understanding different value orientations is imperative for understanding sustainability.

Table 5: Metaphors for Sustainability

Literature	Metaphors	Concepts (Sustainability is about)
Carew and Mitchell (2006)	Weaving	integration, relation, connection, community values, social coherence
	Guarding	control, management, legislation, protection, techno-centric solutions
	Trading	measuring cost and benefits, decision making, individual rights, common goods
	Limits	containment, capacity, bio-centric containment, restraint
Milne, Kearins and Walton (2006)	Journey	ongoing adaptive learning process, change management
Leonard (2008)	Symbiosis	relation, mutual benefits, symbiotic relationship between organisation and human affairs
Princeton (2010)	Scale	human-nature interactions are in balance and have the right size
	Tide	cyclic, ever-renewing, ever-changing, punctuated by extreme events
	System	complex, changing, exhibition of intangible elements, ecological integrity
Carpenter et al. (2001)	Resilience	measurable and quantifiable, adaptive capacity, innovation
Norgaard (2010)	Ecosystem Service	biological evolution, flow of services and energy in ecology
Brown, Dillard and Marshall (2006); Milne and Brych (2011); Milne and Gray (2013)	Triple Bottom Line (TBL)	multiple, simultaneous yet competing organisational objectives, achieving these objectives is achieving sustainability (which is a problematic assumption used by managers who adopt a business-as-usual approach when managing sustainability)

More importantly, Princeton (2010, p.60) considers "the fact that metaphors are inescapable, that they provide normative interpretations and affect how we act, suggest that new metaphors, ecologically grounded ones, can indeed be constructed". This signals that there is a potential lack of ecologically grounded metaphors in the sustainability discourse. Creation of such an ecologically grounded metaphor can help shift the concept of sustainability from "a world view that is linear, mechanistic, reductionist, expansionist and consumerist to one that is cyclic, organic, complex, constrained and, shall we say, productive or self-generating" (Princeton, 2010, p.60).

In addition to offering understanding of the concept of sustainability, metaphor can also be used to elaborate how business organisations should consider sustainability management and reporting practices, and the potential impacts on environment and society (Livesey and Kearins, 2002; Brown, Marshall and Dillard, 2006; Milne, Kearins and Walton, 2006; Milne and Brych, 2011; Milne and Gray, 2013). As an example, Milne, Kearins and Walton (2006) indicate the journey metaphor for sustainability is

> both a prevalent metaphor in businesses' representations of their engagement with sustainability and a powerful one that predisposes understanding of sustainability as some kind of process rather than as a particular kind of end-state (p.802).

Based on Milne, Kearins and Walton's (2006) observation and discussion, when firms use the journey metaphor[19]to communicate their sustainability management goals, it is associated with both positive (that sustainability management and reporting is an ongoing process and there is forward-looking continuous improvement and learning) and negative (the firm is avoiding specifying a future desirable state of affairs) meanings. Furthermore, they consider that the journey metaphor could be a source of criticism towards the discourse of sustainability, "mask[ing] the issue of towards what it is that businesses are actually, or even supposedly, moving" (Milne, Kearins and Walton, 2006, p.801). This metaphor has implications for evaluating sustainability reporting practices, as the rather obscured connotation of "journey" could mean that a business is staying on the business-as-usual managerial approach in disclosing its self-defined sustainability performance without radically changing the business course.

Similarly, Liversey and Kearins (2002) find that metaphors such as "transparency" and "caring" used in corporate sustainability disclosures both "reflect and influence socio-political struggle over the meanings and practices of sustainable development"

[19]As an example, Westpac Bank (2004, p.12) reports "For a number of years now, we have been on a journey to embed responsible, ethical, trustworthy business behaviour throughout the company."

(p.233). For instance, the Body Shop's application of the "caring" metaphor in its sustainability report shows the company's willingness to extend its level of social engagement beyond commercial boundaries and into the political realm (Liversey and Kearins, 2002). Similar metaphors, such as "passionate care", have been used by firms like Westpac Bank to promote the company's advocacy in sustainability management (Westpac, 2008). Liversey and Kearins (2002) warn that it can be dangerous to take certain metaphors for granted, and suggest that businesses' sustainability discourse can be merely an impression management tactic rather than a true reflection of substantive organisational change. As an example, they assert that the "transparency" metaphor "carries with it the potential to reconstitute 'reality' related to sustainable development in one-sided, arbitrary, and manipulative ways", and that "corporations will make transparent what they will want to have seen" (Liversey and Kearins, 2002, p.250).

The Triple Bottom Line (TBL) has been recognised as both a metaphor and condition for sustainability (Norman and MacDonald, 2004; Milne and Brych, 2011, Brown, Marshall and Dillard, 2006; Milne and Gray, 2013). Its impact on sustainability reporting is pervasive, due to the fact that it serves as the foundation of the development of GRI guidelines (Moneva, Archel and Correa, 2006; Perrini and Tencati, 2006; Milne and Gray, 2013). Its limitation and flaws have also been discussed, including concerns about whether sustainability reports prepared using a TBL approach provide relevant information to access corporate responsibility and enforce accountability and social sustainability (Brown, Marshall and Dillard, 2006), or whether TBL could in fact reinforce impression management and lead to unsustainability (Milne and Gray, 2013). Thus, it is argued that TBL is not an adequate metaphor for sustainability; rather, it could instead be a detrimental representation of sustainability (Brown, Marshall and Dillard, 2006; Milne and Gray, 2013).

Several authors have used ecology-based metaphors to communicate sustainability (Princeton, 2010; Norgaard, 2010). Although these authors use phrases such as "system" or "ecosystem", their application of ecosystem thinking focuses on indicating that sustainability needs to consider ecology integrity and flows of energies between species in the ecosystem, rather than stating what the desired state for sustainability is from an ecosystem perspective. This research then imposes a different ecologically-informed metaphor, highlighting that ecosystem balance and harmony are essential criteria for achieving sustainability.

5.4 An Evaluation of Sustainability Metaphors

The examples of sustainability metaphors reviewed in the previous section suggest that metaphor often communicates a limited or biased concept of sustainability, and can potentially lead to undesirable consequences when it is as a vehicle for communicating businesses' sustainability objectives. One particular criticism towards certain metaphors of sustainability is the lack of ecological considerations (Princeton, 2010). Milne and Gray (2013) specifically indicate that such a problem is rooted in human- and economy-centric sustainable development doctrine.

As outlined in Chapter Four, the difference between sustainable development principles and ecosystem sustainability is the contrast between "weak sustainability" and "strong sustainability", and the difference can be seen in a number of value propositions and assumptions embraced by the two views of sustainability.

5.4.1 Role of Humans in Sustainability

One of the contrasts between different sustainability metaphors is the choice of ethical grounds – anthropocentrism or anti-anthropocentrism (Turner and Pearce, 1993; Seghezzo, 2009). The divide between the anthropocentric (regarding humankind as the central point of existence, also referred to economic-centric) and the anti-anthropocentric (nature-centric, also referred to bio-centric or eco-centric) leads to many issues in the area of sustainability, including politics, organisational management, and performance measurement and disclosure (Shearman, 1990; Purser, Park and Montuori, 1995; Richardson, 1997; Williams and Millington, 2004; Bonnett, 2002). More importantly, the clash between these two views leads to an important question: is a radical change in the relationship between humans and nature required to achieve sustainability (Richardson, 1997; Anand and Sen, 2000)?

For example, the guarding metaphor (in Carew and Mitchell, 2006) reflects an anthropocentric viewpoint, as it emphasises the dominant role of humans (control and management of nature resources) as a key aspect of sustainability management. As stated by Carew and Mitchell (2006, p.224): "This (guarding) metaphor focuses heavily on the resource conservation aspect of sustainability and appears to contain implicit assumptions about control of resources and the commodification of nature." As a comparison, Leonard (2008) uses the symbiosis metaphor to state that humans are just part of the natural order like all other species; hence the viewpoint is more towards anti-anthropocentricism and more ecologically informed.

Bhaskar (1989) states that anthropocentrism is an ontological error, as it fails to see that "the way things are in the world takes no particular account of how human beings are, or how they choose to represent them" (p.154). Goodpaster (1979) further explains that anthropocentrism is also morally unacceptable, as its placement of human beings at the centre in the collective universe is equivalent to unacceptable egoist behavior among individuals. Furthermore, if an anthropocentric view is adopted, economic rationalisation and reduction of nature's intrinsic value becomes acceptable. Even today, the economic rationalisation of nature has remained a problem. The juxtaposition between ontology, ethics, and sustainability is still broadly underlined in the literature concerning sustainability policy decision-making, management, and education (Verbeke et al., 2007; El-Zein et al., 2008; Garaven and McGuire, 2010).

In contrast, Hayward (1997) explains that anti-anthropocentrism, which is embraced by eco-sustainability, is also conceptually unsatisfactory and may be perceived as counterproductive in practice. One issue that many anti-anthropocentrists fail to recognise is that over-criticising the lack of concern for non-human species may in fact cloud the reality that some practices condemned to be anthropocentric actually harm the interests of other human groups (Hayward, 1997; Watson, 1983). Although the anti-anthropocentrists' contribution of highlighting (un)sustainability issues is recognised as bring them to prominence, some also argue that it makes the problem-solving process significantly more difficult (Hayward, 1997; Lynch and Wells, 1998).

It then can be seen that both anthropocentric and anti-anthropocentric views are flawed. Rather than embrace one side or the other, this research argues that a balance can be sought that recognises the contribution and shortcomings of both views. To minimise the ecological harm caused by humans who are driven by anthropocentric need (and greed) and at the same time to reduce the hindrance of slow problem-solving and implementation, the concept of sustainability should consider while humans do not have control over nature, they are important governing forces in preserving nature's integrity.

5.4.2 What Is More Important: Economic Development or Ecology Preservation?

Another difference between sustainable development and ecosystem sustainability is the consideration of the priorities: to preserve the environmental threshold of natural resources or to pursue economic development and improved living standards. Toman (1992) suggests that such differences are rooted in ecologists' and economists' contrasting views of sustainability. According to Toman (1992), ecologists define sustainability as the preservation of the status and function of ecological systems, while economists consider that the maintenance and improvement of human living standards is more important.

Questions and concerns remain as to whether sustainable development concept attributes equal importance to ecological considerations and economic prosperity (Bosselmann, 2008). Some clearly state that the sustainable development concept is built upon a flawed assumption that nature can be sustained along with rapid human economic development (Stern, Common and Barbier, 1996; Kemp and Martens, 2007; Sanchez, 2008). In contrast, eco-sustainability represents a strong version of sustainability that considers that natural resources are limited, and that excessive use or depleting of any type of natural resources will be considered as contributing to unsustainability.

Economists' justification for not considering the preservation of any particular natural resource is the efficiency criterion (Foy, 1990). Policies should be suggested to enable the internalisation of the negative externalities caused by human economic activities (Andrew, 2008; Bithas, 2011). Moreover, some economists strongly believe that the present generation's economic activities will benefit both the present and future generations, thus satisfying the definition of sustainable development, although at the price of a diminishing threshold of environmental capital (Foy, 1990; Noss, 1991; Spangenberg, 2005). However, such views have been criticised due to ignorance of environmental and cultural concerns. Chan and Ma (2003) demonstrated that, the concept of sustainable development has often been misinterpreted as sustainable economic development (as in the case of the continuous GDP growth target set by the State Council of China). Consequently, massive infrastructure construction projects (such as the Three Gorges project in China) driven by economic-oriented development policy often lead to loss of both environmental and social capital (Chan and Ma, 2003; Bonevac, 2010).

Central to the argument is defining the relationship between all types of capital. Despite common economic beliefs that consider that environmental capital used by human activity can be compensated for by produced capitals, ecologists strongly argue that critical natural capital must be accounted for and maintained (Dyllick and Hockerts, 2002; Ekins et al., 2003; Kareiva, 2011). Hence, it is expected that different metaphors for sustainability also reflect whether the views are economically or ecologically oriented. Using the trading metaphor (in Carew and Mitchell, 2006) as an example, sustainability can be regarded as "a process of quantifying the costs and benefits of a decision in order to trade them off against each other" (p.225), and thus that different types of capital (natural, physical, or human-made) can be substituted or replaced. Thus, the trading metaphor for sustainability implies that sustainability can be achieved if new capitals can be provided in lieu of those being depleted. Hence, the trading metaphor potentially justifies the exploitation of natural resources, and is more development-driven than ecologically concerned. On the other hand, the limits metaphor (in Carew and Mitchell, 2006) suggests that preservation is needed and that nature has a capacity that constrains human economic development.

The story of *Wolf Totem* suggests that specific social and economic conditions could influence the perception of priority for sustainability issues. Despite the fact that Mongolian's nomad culture gives the preservation of the grassland ecosystem preservation high priority, Chen witnessed that Mongolian families progressively began to accept industrial and agricultural development in exchange for significantly improved living standards (such as the availability of electricity and electrical tools, convenient livestock farming and surplus food supply). This is very similar to the situation the Chinese government has faced in the past decade, dealing with substantive social demand to enhance the quality of living while balancing domestic and international pressures for the government to pay attention to the severe ramifications for the natural environment (Economy, 2003). Thus, to evaluate a metaphor and the concept of sustainability it communicates, specific contexts such as the social, cultural, political and economic conditions need to be considered.

5.4.3 How to Manage Sustainability: Management Planning or Emergent Strategies?

In addition to ethical grounds and sustainability priorities, this research finds that different metaphors can also communicate alternative approaches to managing sustainability, in terms of planning or emerging strategies. Mintzberg and Walters (1985) establish the strategy continuum by placing deliberate and emergent strategies at each end; this research borrows this traditional model from management literature to evaluate the strategic dynamic of sustainability management as revealed in different metaphors.

It is suggested that organisations incorporate sustainability in the strategic planning process in an attempt to achieve stated sustainability goals (Jognson, et al., 2004; Hopkins et al., 2009; Leon-Soriano, Munoz-Toprres and Chalmeta-Rosaleri, 2010). The effectiveness of formulating and implementing deliberate strategies following the integration of critical sustainability issues with the strategic planning process has been found to contribute to better organisational sustainability performance including financial success, environmental conservation and social equity (Kettinger et al., 1994; Judge and Douglas, 1998; Simpson, 2001; Stinchcombe and Gibson, 2001). The Balanced Scorecard (BSC) was promoted to be an effective methodology enabling organisations to translate sustainability strategies into business reality (Hockerts, 2001; Figge et al., 2002; Huang, Pepper and Bowrey, 2014). The development of information technology has also enhanced strategic planning for sustainability (Burke and Gaughran, 2007; Esquer-Peralta, Velazquez and Munguia, 2008). Strategic processes to achieve sustainability are becoming more controllable, and can be relatively easily planned. Metaphors such as guarding (Carew and Mitchell, 2006), limits (Carew and Mitchell, 2006) and scale (Princen, 2010) portray sustainability management as a measurable and controllable process.

However, some other metaphors (as shown in Table 5), such as system (Princen, 2010), tide (Princen, 2010), and journey (Milne, Kearins and Walton, 2006) portray the dynamic nature of sustainability management, where adaptive organisational learning and emergent strategy formation are required to allow an organisation to pursue sustainability goals. Instead of being controllable and manageable, sustainability management is ever-changing and may be affected by extreme events. This can be considered as a counterpoint to the sustainability management planning perspective, as these metaphors reflect one of the fallacies of strategic planning as outlined by Mintzberg (1994): that the world can be predicted while the strategy is being implemented. Rather, Mintzberg (1994, p.112) clearly states that "sometimes strategies must be left as broad visions, not precisely articulated, to adapt to a changing environment". It is evident that sustainability is an ever-changing concept due to rapid changes in economic, environmental, and social conditions (Mebratu, 1998; Dovers and Handmer, 1992; Van Marrewijk, 2003); thus it could be inappropriate to consider that sustainability management a predictable process that can simply be planned. Rather, businesses should be aware of the dynamic nature of sustainability, and not over emphasise management planning and control. A possible solution is to incorporate systems thinking into the sustainability management decision-making process, due to the capability of systems thinking to enable decision-makers to focus on what should be done, rather than measuring and controlling downstream impacts or unsustainability (Martin, 2008).

The ecosystem thinking model this research promotes aims to articulate an idea that sustainability management can be considered as "ecological strategy", and that a sustainable ecosystem should be both responsive to local conditions and adaptive to changing conditions (Odum, 1969; Iansiti and Levien, 2004). Moreover, Buchi and Vuilleumier (2016) highlight that the success of ecological strategies depends on species' specialisation in an ecosystem. Similarly, Moore (1996, p.26) explains how the ecosystem perspective can be used to understand business world:

> [T]he member organisms also include suppliers, lead producers, competitors, and other stakeholders. Over time, they coevolve their capabilities and roles, and tend to align themselves with the directions set by one or more central companies. Those companies holding leadership roles may change over time, but the function of ecosystem leader is valued by the community because it enables members to

> move toward shared visions to align their investments, and to find mutually supportive roles.

Thus, the new "Wolf Totem" metaphor this research imposes will also enable viewers to examine Chinese banks' sustainability reporting by considering the responsiveness and adaption characteristics, and by considering the different roles Chinese banks play in the banking sector as species specialisation.

5.4.4 Evaluation of Sustainability Metaphors and Why "Wolf Totem" is Different

Using the three criteria in Sections 5.4.1 to 5.4.3, this research provides an evaluation of sustainability metaphors (Table 5) to further demonstrate that metaphors used to describe sustainability communicate certain values, including the ethical grounds of sustainability, the priority given to sustainability concerns, and how sustainability should be managed. Table 6 provides an overview of this evaluation.

As shown in Table 6, this research argues that when a particular metaphor is used, it communicates the authors' value assumptions. As discussed above, this research does not consider that any of the assumptions are necessarily wrong or inappropriate. Rather, they are shaped by the specific social, economic and cultural environment in which the notion of sustainability is conceptualised.

As discussed in Chapter Four, the concept of eco-sustainability is different to the principle of sustainable development. The evaluation of sustainability metaphors also reflects the difference. For example, economic-oriented metaphors such as "weaving", "guarding", "trading", "limits" and "Triple Bottom Line" tend to highlight that humans (and businesses) are capable of quantifying and control the impact caused by economic development on the ecosystem, and hence they promote an anthropocentric, and economic-oriented concept of sustainability. In contrast, ecologically informed metaphors such as "system", "symbiosis", and "ecosystem service" highlight the equal importance of humans and non-human species in maintaining ecosystem sustainability.

Table 6: Evaluation of Metaphors for Sustainability

Literature	**Metaphors**	**Ethical Ground**	**Priority for Sustainability**	**How to Manage Sustainability**
Carew and Mitchell (2006)	Weaving	anthropocentric	neutral	neutral
	Guarding	anthropocentric	economic development	control
	Trading	anthropocentric	economic development	control
	Limits	anthropocentric	economic development	control
Milne, Kearins and Walton (2006)	Journey	neutral (business centric)	neutral (processual)	dynamically
Leonard (2008)	Symbiosis	anti-anthropocentric	ecosystem preservation	dynamically
Princeton (2010)	Scale	neutral	ecosystem preservation	control
	Tide	neutral	neutral	dynamically
	System	anti-anthropocentric	ecosystem preservation	dynamically
Carpenter et al. (2001)	Resilience	anthropocentric	economic development	control
Norgaard (2010)	Ecosystem Service	anti-anthropocentric	ecosystem preservation	dynamically
Brown, Dillard and Marshall (2006); Milne and Brych (2011); Milne and Gray (2013)	Triple Bottom Line (TBL)	anthropocentric	economic development	control

Furthermore, economic-oriented metaphors often portray sustainability management as controlling human impacts on the environment against measurable thresholds and capacities. Alternatively, ecologically informed metaphors communicate a dynamic, systems view of sustainability management, emphasising that proactive and responsive "ecological strategies" need to be implemented to achieve sustainability objectives.

The "Wolf Totem" metaphor this research imposes, which is informed by both the narration of the novel and the ecosystem thinking approach outlined in Chapter Three, communicates a concept of sustainability that seeks to balance the contrasting value assumptions shown in Table 6. As stated earlier, different value assumptions have unique advantages and limitations in relation to the development of a sustainability concept. Therefore, the "Wolf Totem" metaphor aims to emphasise that the both the benefits and limitations of the value assumptions should be taken into consideration when conceptualising sustainability. A more detailed explanation of the "Wolf Totem" metaphor is provided later in this chapter.

5.5 Sustainability Metaphors' Impacts on Sustainability Accounting

Discussions in previous sections summarise and evaluate the varieties of metaphors used to communicate sustainability, further demonstrating that sustainability is a multi-faceted concept. Since the application of metaphor can be considered as a constructivist approach to generate knowledge (Ricoeur, 1979; Ritchie, 1994; Aubusson, Harrison and Ritchie, 2006), it follows that sustainability is also a socially constructed concept (Redclift and Woodgate, 2000; Shinkle and Spencer, 2012). In a similar tone, accounting is also recognised as a socially constructed and socially constructing practice (Hines, 1988). Thus, when a metaphor is used for communicating sustainability, it could result in different impacts on accounting practices, including sustainability reporting (Milne, Kearins and Walton, 2006; Etzion and Ferraro, 2010). Before this research defines the "Wolf Totem" metaphor for sustainability and discusses how it can lead to different considerations for understanding the concept and practical implications of sustainability, it first discusses how the different value assumptions outlined in Section 5.4 could affect the practice of sustainability accounting and reporting. Figure 3illustrates the relationship between sustainability metaphors and their implication for the different aspects of sustainability accounting, including the paradigmatic ground, what should be measured and how sustainability performance should be reported.

As shown in Figure 3, different metaphors used in sustainability discourse are derived from contrasting ethical considerations. The difference in these value assumptions has potential implications for what needs to be done to achieve sustainability. The anthropocentric worldview interprets sustainability as a relatively straightforward human issue, and regards the environment as a dispensable resource that is secondary to humans' wellbeing (Bebbington, 2001; Seghezzo, 2009). Consequently, such an interpretation tends to rely on authoritative bodies and market mechanisms (such as the internalisation of externalities) as a means of protecting the environment. However, this seems to be inadequate (Kallio, Nordberg and Ahonen, 2007). In contrast, the anti-anthropocentric ecosystem perspective reconciles human beings and nature in an integral holism, offering critiques to the rationalisation and reductionist view of nature and promoting participatory and democratic processes in policy making (Davision, 2000; Kallio, Nordberg and Ahonen, 2007). Based on this view, a radical change in the understanding of the relationship between humans and nature is required. However, according to Carvalho (2001), general acceptance and realisation of this kind of fundamental structural change takes a long time.

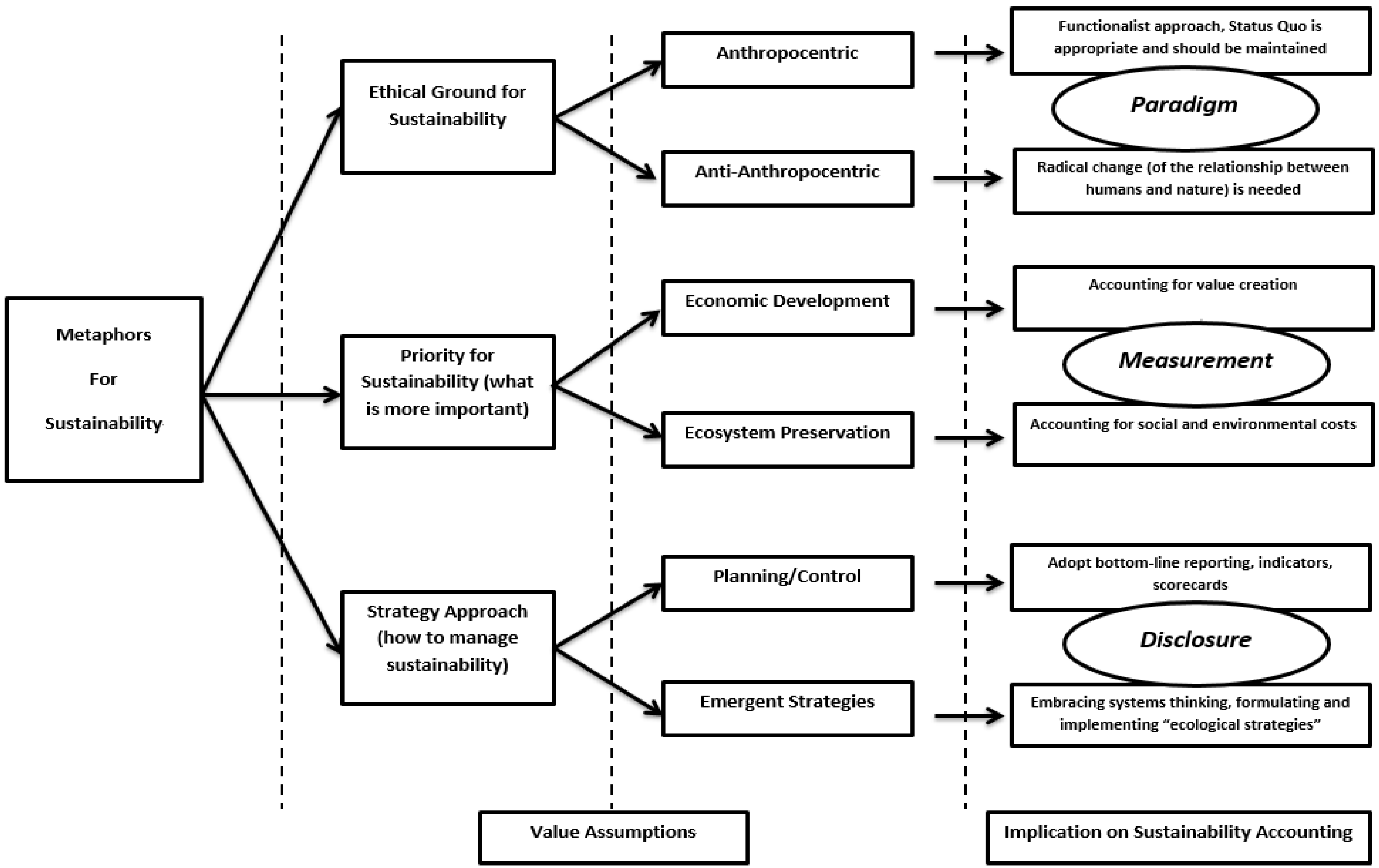

Figure 3: Sustainability Metaphors' Value Assumptions and Potential Impact on Sustainability Accounting

In addition, different priorities in sustainability matters also have potential implications for the role of accounting in measuring and reporting sustainability performance. How to better account social and environmental capital and hence indicate whether the ecosystem can carry the rapid economic development, is an important objective of eco-sustainability thought. Moreover, it drives the development of accounting theories and related policy agendas (Bebbington and Gray, 2001; Lamberton, 2005; Gray, 2010). This research considers that both approaches (preservation and development) fundamentally shape accounting's role in measuring sustainability. For instance, the preservation approach drives the evolution of environmental cost accounting (Bartolomeo et al., 2000; Herbohn, 2005; Burritt, Hahn and Schaltegger, 2006; Lohmann, 2009) while more recent developments in the measurement of value creation (through sustainability management and reporting) are influenced by the sustainable development approach (Figge and Hahn, 2004; Gray, 2006; Milne and Grubnic, 2011). The use of metaphors in sustainability discourses enriches the understanding of the inseparable relationship between accounting and sustainability and potential practical impediments, as well as measuring what is counted as sustainability performance.

Moreover, these sustainability metaphors also communicate that the sustainability management process will need to recognise the importance of both strategic planning and adaptive learning in response to a dynamic environment. Many researchers emphasise the importance of implementing a management framework for the organisation's planning and control mechanisms in order to integrate sustainability with business operations (for example, see: Schaltegger and Wagner, 2006; Searcy, 2012; Gond et al., 2012). Based on the discourses embedded in some of the metaphors used to describe sustainability (e.g. system, tide), this research articulates that beyond planning and control, dynamic management tools such as emergent strategies and interactive controls are also important for achieving organisational sustainability. This particular perspective enables a reconsideration of the role of systems thinking in sustainability management. For instance, a more comprehensive understanding of the relationship between strategy, organisational design, support, performance measurement and disclosure is required (Meadowcroft, 1999; Osborn, 1998; Heidmann, Schaffer and Strahringer, 2008; Hall, 2010).

Milne and Gray's (2013) findings state that the current sustainability reporting practices are largely influenced by the Triple Bottom Line (TBL) approach, and lack true ecological considerations – that "businesses' current attempts to take up an agenda for sustainability are more likely to move us away from, rather than towards, an ecologically viable future" (pp.14-15). This research holds the view that although firms and authorities have been more likely to adopt a sustainable development perspective of sustainability when conducting sustainability-related practices, the ecological perspective of sustainability should not be simply overlooked. The methodology of systems thinking and ecological holism can add unique strengths to the conceptualisation of sustainability, to remind the society about fundamental intrinsic values of the natural ecology. Furthermore, this research argues that there is no need to consider these two contrasting views as mutually exclusive. Rather, eco-sustainability and sustainable development can be regarded as the two ends of a continuous spectrum, along which a balanced and optimised configuration of sustainability concept can be developed. To illustrate what this balanced concept of sustainability may look like, this research imposes a new series of multi-tiered metaphors and demonstrates how the integration of ecological thoughts and systems thinking can be used to comprehend the understanding of sustainability from the context of a complex business sector.

5.6 Imposing a "Wolf Totem" Metaphor for Sustainability

As Young (2013) indicates, providing alternative metaphor to replace familiar ones can produce new and different insights on the matter. To impose a new metaphor for understanding sustainability, this research elaborates the idea of considering sustainability from a balanced and harmonious ecosystem perspective, and gives the concept a metaphorical representation – "Wolf Totem". The aim of this metaphorical creation is to integrate ecosystem thinking in the process of analyzing the content of sustainability reports, thus elaborating the idea that sustainability reporting could be viewed from an ecosystem perspective and thereby provide alternative views for addressing one of the major concern in currents state of sustainability discourse: that it overlooks ecological considerations (Princeton, 2010; Milne and Gray, 2013). To ensure that the "Wolf Totem" metaphor is meaningful and intuitive, this research first outlines the necessary conditions to use metaphor and discusses how this research endeavors to satisfy these conditions.

5.6.1 Preconditions to Applying Metaphor

Bacharach (1989) states that metaphor is different to theory, but can be considered as a "precursor to theories" (p.497), and that the use of metaphor should "assist the theorist in deriving specific propositions and/or hypotheses about the phenomenon being studied (p.497). As such, to evaluate the metaphor, the key consideration is the quality of the propositions and hypotheses generated by the metaphorical image and not about how fit the metaphor is to describe the primary objects. Similarly, Oswick, Putnam and Keenoy (2004) consider that the abstraction caused by using metaphor leads to creative cognitive development and further investigations into phenomena, and hence is valuable, rather than detrimental, to achieve knowledge creation.

However, there are alternative views. There is a mainstream consciousness that accounting as a science or philosophy should only be expounded in precise linguistics free of ambiguity (Arrington and Francis, 1989; Walter-Yorks, 1996). Thus, care needs be taken when metaphor is used as an epistemological tool to conduct research (Ricoeur, 1979; Yob, 2003). Since the use of metaphor highlights the similarity of two different things in a way that may not be otherwise possible, the use of metaphor seems to be inherently associated with increasing levels of potential misunderstanding (Burbules, Schraw, and Trathen, 1989; Oswick, Putnam and Keenoy, 2004; Evans, 2004; Musolff, 2014). As Ricoeur (1979, p.237) states, "only metaphorical application is peculiar; for extension in the application of a label or a schema must satisfy opposed demands – it must be new but fitting, strange but evident, surprising but satisfying".

Cornelissen and Kafouros (2008) provide some detailed explanation of the preconditions of successful metaphor application, which is used to outline how the "Wolf Totem" metaphor is produced. To achieve optimal results, it has been suggested that the metaphorical transfer between the two concepts needs to be significantly different, but neither completely different nor identical (Morgan, 1980; Cornelissen and Kafouros, 2008). To evaluate the strength of the conceptual linkage between the original idea and the metaphor, Cornelissen and Kafouros (2008) highlight three important preconditions to consider when using metaphor:

1. **Within-domains similarity**, which is the "perceived similarity between a source and target concept" (Cornelissen and Kafouros, 2008, p.368).

2. **Between-domains distance,** which is the “semantic distance or similarity between the domains that are accessed by the metaphor” (Cornelissen and Kafouros, 2008, p.368).
3. **Comprehensibility**, which is how easily users can understand the metaphor.

As stated, these preconditions have fundamental influences on the impact (or value) of metaphor in research. The impact or value is defined by Cornelissen and Kafouros (2008) as how well a metaphor can form cognitive changes in theoretical framing to understand meanings. Furthermore, they consider that the value of using metaphors in theorising could be evaluated in terms of the explicatory impact (whether the use of the metaphor leads to clarified conceptual understanding) and generative impact (whether the use of the metaphor provides theoretical advancements and novel insights and inferences). As part of Cornelissen and Kafouros’s (2008) conclusion, it was suggested that metaphors satisfying these preconditions are seen to have greater impacts on clarifying meanings and at the same time advancing theories.

5.6.2 Defining the “Wolf Totem” Metaphor

In *Wolf Totem,* Jiang (2008) describes a variety of animals that hold residency in the grasslands. Some are domesticated livestock such as sheep, goats and cattle; some are animals bred and trained by humans to be used in hunting or guarding their homeland and livestock, including horses and dogs. There are also wild animals, the very few numbered wolves, which Jiang considers as the most important species in the grassland ecosystem. In the book, Jiang exhibits his reverence towards all forms of life in the grassland, and throughout the novel offers appraisals and critiques of certain kinds of animals. Jiang also frequently asserts that a harmonious relationship between all species in the Inner Mongolian grasslands (including humans) is essential to the collective wellbeing and longevity of the ecosystem. These relationships are not entirely natural; instead, the nomad Mongolians deliberately intervene in natural processes to influence and stimulate dynamic changes within the ecosystem (such as organised seasonal hunting and managing the birth rate of livestock and other animals), in the sense of the sustainability management of the grasslands. This story inspires this research's elaboration of a balanced and harmonious ecosystem perspective on sustainability, which argues that a balance should be aimed for when considering opposing views during sustainability management decision-making processes. Thus, the title of the novel, *Wolf Totem,* is used in this research to impose a new metaphor that represents the ideology that achieving balance and harmony is important for sustainability.

To illustrate how this new perspective of understanding sustainability could provide an alternative understanding of firms' sustainability performance and reporting, this research expands the "Wolf Totem" metaphor by constructing additional tiers of understanding. That is, the Mongolian grassland ecosystem in which the story of *Wolf Totem* is set is used as an analogy for the Chinese banking sector, highlighting that system dynamics, changes, and movements are constant variables in both contexts. Like the grasslands in the novel, the Chinese banking sector is considered an evolving ecosystem, in which all species are bound by functional relationships. However, unlike a biological ecosystem, the Chinese banking sector contains many more economic, social, and political relationships and dynamics. Consequentially, using an ecosystem-informed metaphor helps this research to elaborate the complexity of the sector and how the functional, political and social relationships among the players in the sector contribute to broader considerations of sustainability, including economic development, financial stability, environment integrity, and social coherence. More importantly, this research uses some animals that appeared in the story of *Wolf Totem* as metaphors for different types of banks in the Chinese banking sector; the resemblance between animal attributes and bank characteristics will be constructed as the analytical framework this research uses to conduct content analysis, and hence provide narrations to explain findings.

As Figure 4 illustrates, metaphor is applied in this research at three levels. First, at the conceptual level, "Wolf Totem" is imposed as a metaphor for sustainability, highlighting values of ecosystem balance and harmony, in which competition is respected and promoted, and at the same time controlled and managed. Second, at the contextual level, the Inner Mongolian grasslands, a biological ecosystem, are used to portray the Chinese banking sector, which can be considered as an economical/business ecosystem. Finally, four different animals (sheep, dog, gazelle, and goat) are used to represent different types of banks, based on the resemblance between the banks' characteristics and the animals' attributes. Two main influential forces that the author of *Wolf Totem* recognises as being crucial to the overall sustainability of the grassland ecosystem, the role of human and wolf, are used as metaphors to describe the two drivers for Chinese banking sector's sustainability: the control exercised by the Chinese government, particularly through its agent the China Banking Regulatory Commission (CBRC) and the market mechanisms including the competitive environment setting. In Chapter Six, the metaphor transfer analytical framework will be further explained to outline how the metaphorical resemblances are established.

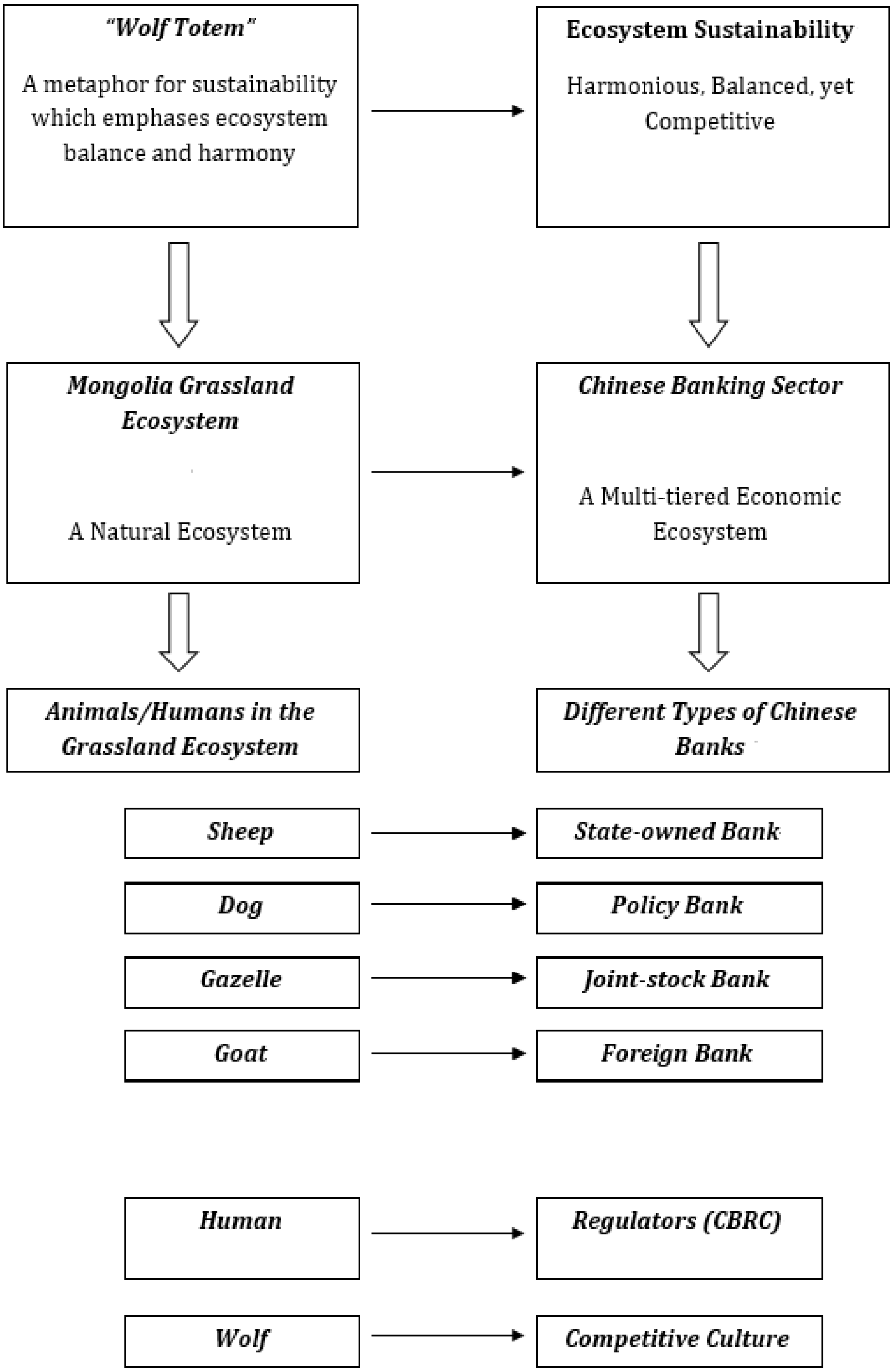

Figure 4: "Wolf Totem" metaphor and its multi-layered meanings

5.6.3 Evaluation of the "Wolf Totem" Metaphor and Chapter Concluding Comments

Different to Carew and Mitchell (2006)'sapproach which the metaphors are produced based on inquiry of different individuals' perceptions of sustainability, this research imposes a metaphor based on the researcher's own understanding. To demonstrate that the creation of the "Wolf Totem" metaphor is the result of careful conceptual development rather than mere imagination, evaluation is provided to address how this metaphor meets the important preconditions of metaphor application and contributes to further understanding of sustainability in the context of organisational studies. This research considers the value of using metaphor as the main vehicle to conduct organisational research and argues that the necessary preconditions are essential and should be embraced.

In terms of within-domain similarity, the first essential precondition prescribed by Cornelissen and Kafouros (2008), this research compares Chinese banks with animals in *Wolf Totem* by commenting on the similarities in their displayed behaviour. Animal metaphors have been used broadly in business discourses: phrases such as "bull or bear markets", "cash cow", or "a dog deal" are frequently used in business language as audiences understand them in a consistent way. Thus, the meaning of these animal metaphors has essentially become literal. The "bull" or "bear" market metaphor's explicit impact is to make sense of market movements by comparing them to animals' physical activity; the animal's salient features are highlighted in the metaphorical transfer (Silaski, 2011). Similarly, when business institutions (rather than markets) are described using metaphor, the emphasis will be placed on similarity to common perceptions of the particular animal. For example, a gorilla is used as a metaphor for a dominating firm in an industry, based on the perceptions that it is the largest primate that openly displays dominating behaviour. In contrast, a turkey is often used as a metaphor for a non-promising start-up company, based on the perception that turkeys are inept or stupid (Silaški, 2011). It is worth noting that these two examples of animal metaphors are very uncommon in Chinese culture, possibly due to the fact they are non-native Chinese animals. Thus to make the "Wolf Totem" system of metaphors more relevant for the unique Chinese contexts in this research, the native Chinese/Mongolian animals in the novel are used as metaphors to comprehend different components of the Chinese banking sector. In this way, this research will demonstrate that the difference in the perceptions of animals based on different cultural backgrounds could lead to a sharp comparison between the metaphors selected for similar types of businesses. For instance, as stated earlier, the gorilla is commonly used as a metaphor for dominating businesses based on the image of its strength and size, while this research proposes a sheep metaphor for the dominating players (state-owned banks) in the Chinese banking sectors, based on aspects of these firms other than their business size and operation scale.

As Lakoff and Johnson (1980, p.10) state, "…metaphorical structuring is partial in that only certain aspects of a target domain are brought into focus, thus stressing the most relevant aspects while at the same time hiding some other aspects of a concept, in line with the principle of metaphorical highlighting and hiding". Thus, by selecting a metaphor that is unusual (for Western culture), this research attempts to place more emphasis on more important and relevant characteristics of certain Chinese banks (e.g. submissive and obedient aspects) rather than general attributes (size or market position). Hence, the scholarly value of the metaphors can be enhanced as Cornelissen and Kafouros (2008, p.376) emphasise: “scholars can increase the potential impact of their theoretical constructs by selecting metaphors that capture important and salient features of organizations”. Additionally, this research can provide some insights on the impact caused by cultural influences on the application of metaphors; as Littlemore (2003, p.273) suggested, that metaphors are “typically culturally-loaded expressions, whose meaning has to be inferred through reference to shared cultural knowledge”, and “[c]onfusion is particularly likely to arise when, for cultural reasons, the speaker and listener attach different connotations to the source domains”. To minimise the likelihood of such confusion, this research establishes a metaphorical transfer framework and explicitly highlights why certain Chinese bank characteristics can be conceptually linked with the source metaphor, drawn from *Wolf Totem* and other literature.

The between-domain distance, the second precondition of metaphor application suggested by Cornelissen and Kafouros (2008), can be considered in this research as the distance between the modern business world and the natural ecology (or, more specifically, the ecological system described in *Wolf Totem*). There is no concrete prescription on how distinct the source and target domains need to be. Cornelissen, Kafouros and Lock (2005) suggest that the distance between the target and source domains of the metaphor needs to be great enough to allow the cognitive development into conceiving understanding in an innovative way, as the semantic anomaly can serve as a surprising factor that leads to potential new insights. But in their later work, Cornelissen and Kafouros (2008) provide a contrary view: that the between-domains distance does not need to be great, as a close domain distance could provide meaningful and effective metaphorical comparisons. Based on these arguments, this research designs a metaphorical story in which between-domain distance can be considered both close enough to provide easy-to-understand comparison and yet distant enough to encourage some novel inferences. Moore (1996, p.26) defines a business ecosystem as “an economic community supported by a foundation of interacting organizations and individuals - the organisms of the business world. The economic community produces goods and services of value to customers, who are themselves members of the ecosystem”. This term has been broadly used in fields such as information technology hardware and software development, and has been used as a metaphor to describe complex and dynamic business structures and operations (Rong et al., 2013; Yu, Li and Zhao, 2011). This demonstrates the close conceptual relationship between the business world and the discipline of ecology. From a different perspective, the source of metaphors used in this study is not just animals in the natural ecology. Rather, these animals’ symbolic meanings in the writing of the *Wolf Totem* and in different cultures are borrowed as references to construct the metaphors used in this research. Similar to Leung and Cooper (2003) where the authors stimulate meaningful metaphorical relationships between business world and the fictional world of Wonderland, this research interprets the Chinese banking sector through the metaphorical frame wrapped in the narration of *Wolf Totem*. One of the main reasons this research considers both the nature and the ecological novel are both important sources for the concept of the metaphor is that *Wolf Totem* has narrated a context that can hardly be observed in the current social reality anymore: a harmonious and balanced ecosystem maintained by a stable relationship between humans and nature. Thus, it is essential this research applies a broader view of the source of the metaphorical concept to establish a more meaningful and innovative narration of the research object.

To satisfy the third precondition, Cornelissen and Kafouros (2008) comment that a metaphor with a high level of comprehensibility leads to enhanced explicatory and generative purposes. To achieve this, a well-established resemblance must be satisfied between objects and metaphors. The major challenge this research aims to accomplish is to establish such a mapping. Although it is not entirely new that animal metaphors have been used to describe business firms, this research portrays a much more detailed relationship between the different metaphors themselves. For instance, as discussed above, animal metaphors such as gorillas and turkeys have been used as metaphors for businesses, but rarely have these metaphors been used to make sense of the business world from an ecosystems view. This research considers that creating a multi-tiered metaphorical concept can not only allow discussions on the similarity between a metaphor and the associated business entity, the linking of these metaphors create an abstract context enabling further inquiries.

This research uses the Mongolian grasslands as the background landscape for metaphors in pursuing a meaningful interpretation of the business sector. Hence, the metaphorical narrative can enable further investigations within the ecosystems view on the dynamic relationship between the primary study objects. This research focuses on a particular business sector, the application of the metaphors assists the investigation of the primary objects' roles and capabilities and makes the explanation more comprehensible. The use of metaphor in this research aims to facilitate better understanding of pre-existing interpretation of conditions or relationships in the Chinese banking sector, and constitutes an innovative and creative understanding of the sector.

It is notable in the context of this research that the “Wolf Totem” metaphor is culture-specific. Littlemore (2003) emphasised that metaphors are grounded in culture, and that cultural knowledge is necessary to establish relevant metaphorical meanings that illustrate important aspects or attributes of the primary object. Cross-culture research conducted on the application of metaphors often finds that although to a certain degree animal metaphors in different languages and cultures communicate similar meanings, many metaphorical aspects are culturally grounded (for example, see: Palmatier, 1995; Talebinejad and Dastjerdi, 2005; Deignan, 2003). More specifically, Deignan (2003) clearly points out that the root cause for the cross-linguistic differences in metaphor applications in different cultures is that attitudes and perceptions associated with the metaphor are culture-grounded, and thus culture-specific. Additionally, differences exist in the salient cultural understanding of the source of the metaphor, hence making metaphorical expressions culture-reflective.

The scenario discussed above is very transparent in the comparison between animal metaphors in English and Chinese culture. There are some similarities, for instance, the fox metaphor is associated with human cunning in both instances. This is because a basic attribute (natural characteristic) observable in both cultures is used as the source for the metaphor (Jia, 2000). However, when salient features of particular animals are not commonly perceived in another culture, there will be “culture shock” from a poor transfer of the metaphor (Kovecses, 2005). For example, in Chinese culture, the mythical creature dragon stands for imperial power, divinity, majesty, and nobility， as the dragon has a prominent position in traditional Chinese culture (Fan, 2000). From its original position as a primitive tribal totem, the dragon has transcended its lexical meaning and became a symbol for China and the Chinese people (Chinese often refer to themselves as the descendants of the dragon). The culturally enriched meanings invested in the dragon metaphor in Chinese society are always associated with positive connotations (Yau, 1988; Fan, 2000). On the contrary, in Western culture, dragons can represent devilish and demonic powers, and could be used as a metaphor to describe violent and tyrannic humans. These contrasting associations in Chinese and English culture appear in many domains, including many artistic and literacy works. Therefore, to reduce the bias caused by culture barriers when constructing the metaphors used in this research, the selection of animal metaphors is first discussed to outline the particular aspects of these metaphors, and whether cultural differences could influence their potential explicatory and generative impacts.

It needs to be made explicit that *Wolf Totem* itself is already a story of culture clash and invasion, in which the fierce conflict between traditional Mongolian nomad culture and Han-centric Chinese agricultural culture are often discussed and critiqued. Hence, when the "Wolf Totem" metaphor is constructed based on the story in the novel, the conceptual meaning of these metaphors will lean towards a particular culture-specific understanding. In the next chapter, the *Wolf Totem* analytical framework will be established and further explained to outline how the culture-specific "Wolf Totem" metaphor can be used to describe the sustainability practices of the Chinese banking sector.

Chapter Six：Research Design

> An understanding of the metaphorical nature of knowledge thus leads to a basic problem of epistemology. It leads us to recognize that human agency and the limitation imposed by perspective are fundamental in the generation of knowledge, and that our knowledge always falls short in representing the full texture of reality. Our lot as human beings dealing with a complex, multi-dimensional and paradoxical world, is that our knowledge can do no more than create a weak and rather un-dimensional representation of that world. Though achievements in technology may convince us that we are much more knowledgeable than we actually are – since the ability to manipulate with predictable results is not a true measure of knowledge or understanding – our knowledge always falls short of the ideal state which philosophers from Plato to Hegel have encouraged us to achieve.
>
> - Morgan (1988, p.480)

The previous chapter stated that this research imposes a "Wolf Totem" metaphor to promote a concept of sustainability from the perspective of ecosystem balance and harmony. Furthermore, by imposing this unique metaphor, this research aims to articulate an abstraction that allows the Chinese banking sector to be viewed as an ecosystem, and the banks' sustainability reports can be used as indicators for ecosystem (um)balance and (dis)harmony. This chapter explains how this research endeavours to achieve this objective by outlining the research design and methods.

6.1 Overview

This research uses a two-stage approach by providing a metaphorical narrative explanation for the results of a content analysis of Chinese banks' sustainability reports. First, a content analysis will be conducted to identify observable themes and features in the 2008-2012 sustainability reports issued by sample Chinese banks. The results from the content analysis will be used as triggers for the second stage of this research design: a metaphorical interpretation of the findings. By comparing how different Chinese banks manage and report sustainability issues, it is possible to evaluate whether a resemblance can be established based on the similarities between the behaviour of Chinese banks and the characteristics of their metaphorical concepts. The metaphorical narrative will be used to explain Chinese banks' characteristics.

Therefore, this research takes a creative and novel approach, constructing narratives as a research output to provide meaningful explanations of sustainability reporting practice in China from a different perspective to conventional research using system-oriented theories. This chapter establishes how a "Wolf Totem" themed analytical framework is established to guide the content analysis, and explains how the metaphorical narrative approach is applied in this research to contribute to knowledge.

6.2 Content Analysis

Content analysis is described as "a technique for gathering and analysing the content of text" (Neuman, 2006, p.319). This method has been broadly applied in the field of sustainability reporting (see, for example, Thompson, 2007; Hogner, 1982; Guthrie and Parker, 1989; Deegan, 2002; Hackston and Milne, 1996; Harwood and Garry, 2003), and is recognised as an acceptable and robust means by which to examine the sustainability reporting content (Hackston and Milne, 1996; Thompson, 2007).

Content analysis aims to study a large amount of textual information and systematically identify its properties and characteristics (Stemler, 2001; Guthrie et al., 2004; Unerman, 2000; Neuman, 2006; Kim, 2013). Quantitative indicators including prevalence of particular keywords or the number of pages can be used to identify important structures of the communicated content. Categories of textual information can also be organised to provide a meaningful reading or interpretation of content (Unerman, 2000; Neuman, 2006). The application of content analysis enables the researcher to make inferences regarding the antecedents, characteristics, and the consequences of communication (Holsti, 1969; Hsieh and Shannon, 2005). The method can be used in either a quantitative or qualitative way (Neuman, 2006; Hsieh and Shannon, 2005). The more often used quantitative approach typically counts words, sentences, paragraphs, or pages to classify textual data into meaningful categories (Rouke and Anderson, 2004). In contrast, qualitative content analysis often results in subjective interpretation of the text data based on results of a systematic classification process and identified themes or patterns (Hsieh and Shannon, 2005).

This research uses content qualitatively, through summative content analysis. Hsieh and Shannon (2005, p.1283) outline that "a study using a summative approach to qualitative content analysis starts with identifying and quantifying certain words or content in text with the purpose of understanding the contextual use of the words or content". It starts with some quantitative measurements, but the process is to explore the usage of messages rather than to infer meanings. Based on the results of quantitative measurement, a latent content analysis will be included to provide interpretation of the content (Holsti, 1969; Lee and Kim, 2001). Thus, summative content analysis could enable the researcher to relate certain characteristics of the content providers (Chinese banks) to the messages they provide in their sustainability reports. As Hsieh and Shannon (2005) emphasise, a summative content analysis relies heavily on credibility. Consistency between the textual data and the interpretation needs to be established to demonstrate credibility and trustworthiness.

In this research, an analytical framework is established to demonstrate that this consistency by aligning the similarities between the banks' characteristics and the metaphor chosen to represent them. The next section describes this "Wolf Totem" analytical framework by outlining what banking characteristics are highlighted in the metaphorical concepts. After establishing the metaphorical transfer process, sections 6.4.1-6.4.4 will introduce the related content in sustainability reports this research investigates to identify resemblance between banks and their metaphors.

6.3 The "Wolf Totem" Analytical Framework

As Oswick, Putnam and Keenoy (2004) outline, to impose particular tropes is to project understandings and aims to promote resonance, as shown in Figure 5.

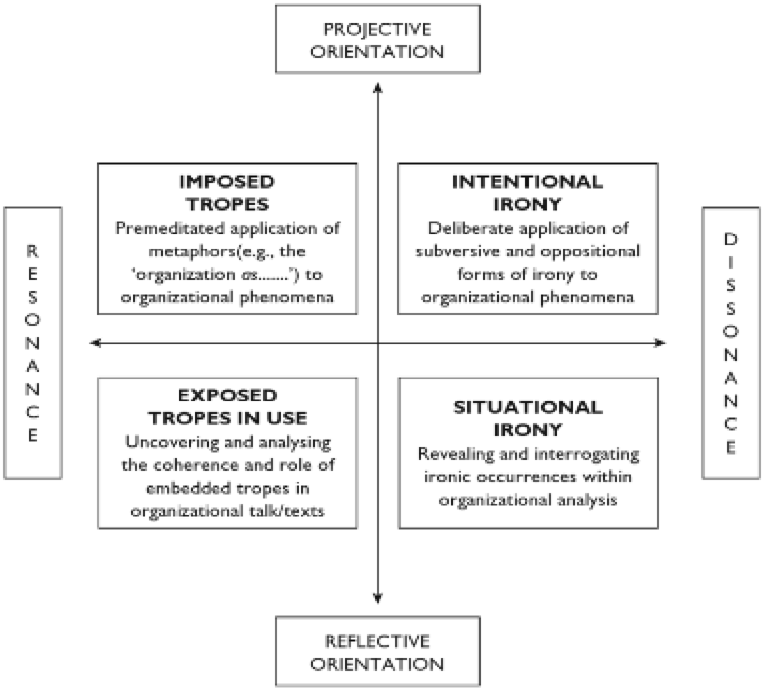

Figure 5: Topological Approaches to the Analysis of Organisational Discourse

(Oswick, Putnam and Keenoy, 2004, p.120)

Thus, to enhance the credibility of the imposed metaphor, resonance between the metaphor concept and the primary object needs to be firmly established. This research aims to achieve this by explicitly explaining the process of metaphor transfer between Chinese banks and the corresponding animals and clearly indicates the cognitive and conceptual similarities between the metaphors used and the objects these metaphors describe. To maintain a conceptual coherence, all metaphors are derived from *Wolf Totem*, and from the same foundation of ecology. Jiang's (2008) narrations, appraisals, and critiques of different types of animals are used to define the boundaries of these metaphors, and are supported by societal and cultural perceptions of the animals. In the same view, characteristics of different players in the Chinese banking sector are summarised with reference to the relevant literature. Thus, the interpretation using these metaphors is grounded in both ecology and the existing body of knowledge about the Chinese banking sector. Discussions are provided to outline how resemblances can be established between the metaphors and the research objects. For that purpose, Jiang's (2008) depiction of the animals is compared to the unique characteristics of each type of Chinese bank to determine whether a metaphorical understanding can be established. This key purpose is to establish an evidential and satisfying relationship between the metaphors and the objects, achieving essential criteria outlined by Ricoeur (1979) for better application of metaphor.

Table 7 illustrates the analytical framework constructed using the "Wolf Totem" metaphors; the following sections provide a detailed explanation of each metaphorical concept and how it will guide the content analysis in this research.

Table 7: The "Wolf Totem" Themed Metaphorical Analytical Framework

Metaphor	Characteristics (in *Wolf Totem*)	Related Content in Sustainability Report	Example from Sustainability Reports
Sheep	Sheep are submissive, obedient, and relatively weak.	Whether state-owned banks support state policies and provide loans to other state-owned enterprises, and the impact on their non-performing loan ratios and profitability ratios.	"It is an important part of the social responsibility fulfillment for the Bank to keep good operation according to the national macroeconomic policies" (ICBC, 2009, p.35).
Dog	Dogs are loyal, charged with duties to protect sheep, and are very dependent on humans.	Whether policy banks serve national strategies and take over financial burdens from state-owned banks by providing loans to key industries that are dominated by state-owned enterprises.	"RMB loans of 1.3289 trillion yuan were issued to the 'two basics and one pillar' sectors, up 64.5% year-on- year, including the construction of national backbone railway networks, highway networks and oil reserves" (CDB, 2009, p.35).
Gazelle	Gazelles are very flexible, more adaptive to natural environment, and are less dependent on humans.	Whether joint-stock banks report better operational efficiency as measured by financial ratios, and detach themselves from concentrated government control, and what the impact is on innovation and growth.	Innovative Products - Merchant Bank is the first Chinese bank to adopt Web 2.0 technology (CMB, 2010, p.24).
Goat	Goats are smart, brave, and vigilant, often aware of danger.	Whether foreign banks report on penetration in the Chinese market and how risk management and mitigation are integrated in sustainability management and reporting.	Disclosure of effort to establish cultural links to further enhance the banks' profitability and survivability in China (HSBC, 2008, pp.24-26).

6.3.1 A Sheep Metaphor for Chinese State-owned Banks

In Chinese, the symbol “羊” can mean both sheep and goat; the meanings are distinguished by the addition of specific adjectives. The ideogram pair “绵羊”, is specific for “sheep”, with the symbol “绵” describing its cotton-like, soft feelings. The ideogram pair “山羊”, is specific for “goat”, where “山” is mountain, in the New Testament of the Bible, Jesus speaks of separating “the sheep from the goats” at the Last Judgement. In all three cultures mentioned above (Han Chinese, Mongolian, and Western), sheep have been associated with docile and submissive characteristics – “sheep tend to follow”. Hence, sheep are a popular metaphor for individuals who have a herd mentality. When people are easily influenced by governing powers to adopt certain behaviour, they are described as having sheep-like behaviour, or as “sheeple” – a portmanteau of sheep and people (“We ‘the sheeple’”, 2015). Thus, the sheep metaphor contains a meaning that one unthinkingly adopts a behavioural pattern as the results of a rather simple and submissive mindset. Han Chinese culture emphasises the positive attributes of sheep, such as kindness and innocence, rather than highlighting their relative physical and mental weaknesses (Culturalink, 2011). Portmanteau approaches have also been seen in the creation of Chinese symbolic language; for example, in traditional Chinese writing,“美” (beautiful), “善” (kindness), “祥” (auspicious) and “義” (righteousness) all contain the symbol of sheep (“羊”). In other words, although the negative associations such as being blindly submissive are present, in fact the sheep metaphor is more strongly associated with positive meanings in Chinese culture. It is very significant that the sheep metaphor is quite different to lamb metaphor in English. Often “lamb” is used in English to narrate meanings such as sacrificial, mild-tempered and gentle, while “sheep” is more often associated with meekness and cowardice. In Chinese, although lamb has its own symbol “羔”, the symbol of sheep/goat is used more frequently and considered to be an equivalent metaphor for lamb when discussing the aspects of submissive, cowardly behaviours.

In *Wolf Totem*, Jiang’s (2008) narration provides some clearer boundaries for the sheep metaphor used in this research. According Jiang (2008), sheep are the lifeline of tribal Mongolian families, and are the most important livestock bred by Mongolians. They provide food, fuel for cooking and heating (manure), and income (wool) to support Mongolian nomads’ basic lifestyle. Mongolians treasure their sheep and take a great deal of care in protecting them. In relation to the grassland ecosystem, sheep are the largest consumers of grasses, and at the same time, the most important provider of fertilisers to maintain grass growth. The novel contains multiple scenes in which Bilgee emphasises the significance of maintaining the right amount of sheep on grasslands via his dialogue with the author. For example, in Chapter 16 of *Wolf Totem* the author quotes Bilgee: "if you control the quantity of livestock, not only will they not deplete the grassland, but they'll actually enrich it. The best tribal leaders of the past were able to turn sandy soil into rich grassland" (Jiang, 2008, p.231). The author also expressed negative comments about sheep. In particular, he considered sheep to be "cowardly and stupid", noting that they would "passively accept the slaughter” if attacked by wolves (Jiang, 2008, p.115). Overall, the author acknowledges the significance of sheep contributing to both Mongolians’ livelihood and the grassland ecosystem; however, he considers that sheep are inherently weak, and lack sufficient natural abilities to protect themselves from harm.

State-owned banks are the cornerstone of the Chinese banking sector, with important roles in supporting the most important banking services including national infrastructure construction, institutional and personal finance, and rural development (Cull and Xu, 2000; Lardy, 2004; Naughton, 2007). As shown in Table 1 (Chapter Two), the state-owned Chinese banks hold nearly half of the total assets of all banking institutions in China (China Banking Regulatory Commission, 2012). However, Chinese state-owned banks' operational efficiency is commonly criticised, largely due to the burden from a significant number of non-performing loans (Cull and Xu, 2000; Chen et al., 2005; Berger, Hasan and Zhou, 2009). The majority of these non-performing loans are made to other state-owned enterprises in key industrial sectors of the Chinese economy as part of the banks' commitment to state policy (Firth et al., 2009). The inseparable financial relationship between Chinese state-owned banks and other state-owned enterprises is metaphorically described as "the Siamese twins" by Wei and Wang (1997). As a consequence, the competitiveness and profitability of Chinese state-owned banks is considered to be weaker when compared to other types of banks in China because of these non-performing loans (Chi et al., 2005; Chi, Zheng and Yang, 2009).

Thus, resonances can be established between the Chinese banks and the sheep described in *Wolf Totem*. They both have the most significant presence in the ecosystem in which they live, yet both are considered weak. The way Chinese state-owned banks submissively provide funding to the state on a continuous basis is akin to the contribution sheep make to Mongolians' lifestyle. The Chinese state government's bureaucratic management of Chinese state-owned banks has resulted in inefficient management and operation (Cull and Xu, 2000). Similarly, in *Wolf Totem*, the author considers that sheep have become too dependent on humans. Jiang's (2008) perception of sheep as "cowardly and stupid" is similar to the criticisms directed towards the Chinese state-owned banks as inefficient. Sheep's submissive, obedient, and weak nature can be compared state-owned banks' negative attributes, including non-performing loan burdens and, lower competitiveness and profitability. In the content analysis, this research will collect and analyse quantitative and qualitative data in relation to these attributes to discuss how the data represent state-owned banks' sheep-like characteristics. It will search state-owned banks' sustainability reports for contents containing key words "non-performing loans" and "state policies" and financial ratios measuring efficiency (profitability ratios). The finding will then be summarised to provide the metaphorical narrative.

6.3.2 A Dog Metaphor for Chinese Policy Banks

Dogs are described as "man's best friend" in many different cultures (Breen and Modiana, 2008; Starkey et al., 2005). Dogs are portrayed in stories, novels, dramas and movies as being loyal and heroic (for example, *Eight Below*, *A Dog's Life*, *Hachiko: A Dog's Tale*, and *Inspector Rex*). In Chinese culture, dogs have a complicated relationship with humans, because they have been used as both a companion and a source for food (Custer, 2016; Koiviola, 2013). Some negative meanings have also been associated with dogs in the Chinese language, including that they are dirty, wretched, vicious, miserable, and parasitic. Many Chinese slang terms containing the word "dog" are often understood as negative critiques. For instance, "猪狗不如" (worse than a dog or pig) is the Chinese way to express that someone is "lower than low".

Through *Wolf Totem*, Jiang (2008) portrays how dogs are treated differently in Han Chinese and Mongolian nomad culture. For instance, the majority of Chinese immigrates living in the grasslands have very negative feelings towards dogs and do not hesitate to kill and consume them. The attitudes are very different in Mongolian nomad homes: dogs are considered as valuable assets and loyal family members, often acting as fierce guards of the household's most important assets (livestock) and even the owner's life. Based on this comparison, the Mongolian culture's appreciation of dog is closer to the Western's stereotyping of dogs as a human's best friend, with associated meanings of being loyalty and heroism.

According to Jiang (2008), the relationship between dogs and Mongolian nomads is like "comrades-in-arms, best friends and brothers" (p.195). While the author lived in the Mongolian grasslands, three dogs accompanied him almost constantly, and dogs appear in nearly every chapter of the novel. For Jiang, dogs are fundamental to Mongolian families, due to their effectiveness in hunting and in tending livestock. Compared to all other animals in the grasslands, dogs have the most intimate relationship with humans, as loyal companions and even, in extreme circumstances, life savers. Dogs' natural role in the grassland ecosystem is to protect humans and livestock, yet their own survival depends in turn on humans and livestock. Moreover, the number of dogs in a grassland ecosystem is also correlated to the quantities of their mortal rivals – wolves. As Bilgee explains to Jiang in Chapter 12 of the novel, "[T]he dogs should thank the wolves, for without them, the herdsmen would have no need to keep so much meat on hand, and their pups would be off to Tengger (the heavenly spirit) soon after they came into the world" (Jiang, 2008, p.195). In other words, dogs are guardians of the weaker sheep, protecting them from harm, and are dutiful servants of humans, thus displaying loyalty and obedience.

The Chinese policy banks (including the China Development Bank, Agricultural Development of China, and Import and Export Bank of China) were established in the 1980sto offer protection to state-owned banks (Naughton, 2007; Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009). The primary role of the policy banks is to take over the government-directed spending functions of the state-owned banks, thereby reducing the burden of non-performing loans that the state-owned banks carry. Economic and trade development and state-invested projects in China are largely financed by policy banks (Byrd, 1983; Naugthton, 2007). The State Council of China oversees the entire operational process of these three policy banks, and the Chinese Government is the sole owner of all three (Naughton, 2007; Turner et al., 2012).

There are similarities between Jiang's (2008) descriptions of dogs in the Mongolian grassland ecosystem and the characteristics that the Chinese policy banks display. First, both dogs and policy banks have the closest relationship with the ruling class (Mongolian nomads and the Chinese Government respectively), but their survival also depends on the ruling class. Both dogs and policy banks are loyal and amenably fulfil duties that their owners delegate to them. Moreover, as a primary role, they are both charged with responsibilities of offering protection to the weaker species in the ecosystem. In this sense, this research imposes the dog as a metaphor to describe the role of policy banks in the Chinese banking sector. In the content analysis process, this research will gather evidence to reveal how the China Development Bank provides protection to state-owned banks in fulfilment of its role as a policy bank, and how it demonstrates its loyalty to the state government through sustainability disclosures.

6.3.3 A Gazelle Metaphor for Chinese Joint-stock Banks

Gazelles only exist in very few regions across China, mainly in Inner Mongolia and Tibet (Lei, Jiang and Liu, 2001). Therefore, the gazelle appears infrequently in traditional Chinese language. In Western culture, the salient characteristics of gazelles are well recognised. Their agility and swiftness are often applied as metaphorical concepts to businesses that are growing at high rates or are highly innovative (Silaški, 2011). Similarly, in *Wolf Totem*, Jiang's (2008) depiction of gazelles in the Inner Mongolian grasslands are also biased towards his appreciation of this fit and agile animal. He writes of witnessing how gazelles fighting against the harsh natural environment and danger from predators. To him, gazelles are much better at survival than domesticated livestock, and thus represent the spirit of adaptation.

Gazelles are described by Jiang (2008) as highly agile grassland animals that often migrate between different areas in a grassland ecosystem based on the availability of grass and the presence of wolves. They constitute a major threat to the survival of sheep due to the fierce competition for grass between them. As a consequence, not only do they face life-threatening danger from predatory wolves, they are also hunted by the Mongolian nomads in an organised manner for the purpose of ensuring an adequate supply of grass for sheep (Jiang, 2008, pp.15-31). This extremely dangerous environment has forced gazelles to develop enhanced natural abilities including speed, endurance, and a sharp sense of danger. In the Mongolian grassland ecosystem, the presence of gazelles is relatively small compared to the number of domesticated livestock. Since humans provide no protection for gazelles, these animals become very independent, flexible and adaptive to their external environment. Although they are a threat to both the grassland and sheep due to their diet of large quantities of grass, at the same time their existence positively contributes to wellbeing of both sheep (as a substitute food source for wolves) and Mongolians (in the provision of meat and pelts).

Joint-stock banks are smaller commercial banks in the Chinese banking sector, with more privatized ownerships, mostly established after the Chinese banking sector reform in the 1980s (Naughton, 2007; Berger, Hasan and Zhou, 2009). Although relatively smaller in operational capacity and asset bases than state-owned banks, joint-stock banks are generally more efficient and healthier in terms of asset quality and profitability, largely due to a much lower non-performing loan ratio (Chen et al., 2005; Shih, Zhang and Liu, 2007; Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009). As commonly suggested in the literature, privatisation often leads to higher efficiency, due to the positive influences of outsider ownership on organisations' accountability, profit motives, and resource management (De Fraja, 1991; Hunt and Lynk, 1995; Ng and Seabright, 2001; Andrew, 2007). Their more diversified ownership structure has also helped joint-stock banks operate more efficiently and profitably than other state-owned banks.

Similarities are apparent between comparing gazelles and joint-stock banks in relation to their roles in their respective ecosystems, which is as a considerable competitive force against the dominating species. Moreover, gazelles' natural agility and flexibility, gained through honing their skills in the wild, are very similar to joint-stock banks' improved competitiveness enabled by the privatised ownership. This research imposes the gazelle metaphor for joint-stock banks as a means to promote the joint-stock banks' salient feature of being more flexible and efficient when compared to the state-owned banks. The content analysis will look for joint-stock banks' sustainability disclosures in relation to keywords including operational efficiency, change of state-ownership and innovation.

6.3.4 A Goat Metaphor for Foreign Banks

Compared to sheep, goats have relatively fewer metaphorical meanings in various cultures. However, the understanding that "goats go their own way" (in comparison to sheep, which prefer to follow) is common. (for example, in the Bible or in the story of *Wolf Totem*). Western urban legend such as the "goatman story" (for example, the *Goatman of Maryland*; see: Aratani, 2008) portrays that goats are much fiercer than sheep, and can be recognised as a representation of both viciousness and bravery.

Goats are not a native Mongolian grassland animal. The Mongolian nomad shepherds imported goats from other regions of China and ran them with a large herd of sheep. The benefit of doing so, according to Jiang (2008), is that goats are fearless, capable of acting as the leader of the herd and even steering away smaller packs of predatory animals. Compared to the perception of sheep as "passive acceptors of death", goats are considered to be much smarter, more vigilant and more capable of raising the alarm for the shepherd when wolves are spotted (Jiang, 2008, p.115). Although goats are not discussed at length in the book, Jiang (2008) states that the introduction of goats into the sheep community was beneficial, with goats being capable of dealing with dangerous situations and harsh environments.

Foreign-owned banks were progressively introduced into the Chinese banking sector following China's entry in the World Trade Organisation (WTO). At first, the

Chinese government imposed restrictions that permitted only foreign-currency services. Then the local currency market slowly opened up (Berger, Hasan and Zhou, 2009). Major global banks, including Citibank, HSBC, the Standard Chartered Bank and the Bank of East Asia soon established market share, and were found to be much more profitable compared to the rest of the sector (Berger, Hasan and Zhou, 2009). Moreover, the introduction of foreign-owned financial institutions to domestic banking markets is considered within the global banking sector to be a means of maintaining the financial stability of the domestic sector because of the introduction of objective, competition-driven management styles (Claessens et al., 2001; Hull, 2002; Domanski, 2005, PricewaterhouseCoopers, 2014).

There is some resonance between goats and foreign-owned banks. The presence of each within their respective ecosystems is very low compared to the population of domestic species. Jiang (2008) indicated that in a common herd, goats account for approximately three to five percent. At a similar level, foreign-owned banks hold 1.8 percent of total assets and deposits in the Chinese banking sector (China Banking Regulatory Commission, 2012). Furthermore, despite limited opportunities for growth (due to trade barriers and restrictions imposed by the Chinese state government), foreign banks have achieved continued growth since entry to China and recorded impressive results in the period of 2007-2012 (PricewaterhouseCoopers, 2012). The relatively higher operational efficiency observed in foreign-owned banks in China parallels the goats' superior natural abilities when compared to sheep, as these banks have accumulated substantial expertise and management excellence through fierce global competition. This research imposes the goat metaphor to reflect these resonances, and more importantly, discusses how the entry of foreign banks could help the development of Chinese banks, just like how Mongolian nomads used goats to guide and protect their sheep livestock.

6.3.5 A Human Metaphor for the Regulatory Body of the Chinese Banking Sector

In *Wolf Totem*, Jiang (2008) discussed at length the roles of humans in the grassland ecosystem. The sharp contrast between the management philosophies of Mongolian nomads and Han immigrants was used to communicate the difference between an ecosystem view and a short-term, greed driven, eco-centric approach to managing the grasslands. Many scenes in the book depict Bilgee lecturing Jiang about the traditional Mongolian teaching in relation to grassland management. To the Mongolian elder Bilgee, human impacts upon the natural ecosystem should be contained at an appropriate level, as wolves are the true guardians and controllers of the grassland ecosystem. In Mongolian cultural beliefs, wolves are sent by the heavenly spirit Tengger to protect the grassland (Jiang, 2008, p.94). The Mongolian emphasises the importance of wolves in a spiritual way, considering that Mongolians are believed to be the descendants of wolves, and wolves are thus worshiped as a totem. Bilgee uses myths and legends to educate Jiang in the Mongolian "wolf culture" and how this culture defines the relationship between humans and nature. Jiang, profoundly influenced by his fascination with "wolf culture", begins to act according to, and to promote, the way Mongolians treat nature, animals, and plants.

However, the arrival of Han immigrants affected the balance between humans and nature in a catastrophic way. The majority of the Han people in China were accustomed to the agricultural lifestyle. To them, the only purpose of animals was for farming and meat supply. At the time of the Cultural Revolution, the economic development in China was in a very slow process of recovery, with people experiencing low standards of living. "Bringing meat to the dinner table" became a priority in policy-making for many local governments in regions across China (Zhou and Hou, 1999). Inner Mongolia, as one of the main livestock producing provinces in China, was burdened with government orders to increase the output of meat products. As a consequence, Mongolian shepherds were forced to tend excessive numbers of livestock, substantially beyond the grasslands' capacity. Even worse, as a means to reduce loss of lambs to wolves' assaults, wolf hunts were regularly organised following the orders of the local Han government.

Hence, it is clear that the two groups of humans, the Han Chinese and nomadic Mongolians, have played very different roles in the grassland ecosystem. The Mongolian nomads managed the grassland in a holistic, more sustainable manner. In contrast, the Han immigrants saw the grasslands merely as means for satisfying their needs, with their exploitation of the grasslands creating significant, unintended, negative consequences. Their different behaviours were largely determined by their different views of nature, especially in relation to the purpose of many natural species. To the Mongolian nomads, their position in the natural order was to be a student of nature, who borrows energy from nature and finally returns to nature upon death (Jiang, 2008, p.279). In contrast, Han immigrants had a view that grassland animals existed solely for the purpose of meeting human needs. Hence, their behaviours largely exploited the animals' wellbeing. These different views are inextricably linked to the comparison between the anthropocentric and ecology-centric views of the relationship between humans and the environment (Andrew, 2000; Zhang-Debrecheny, Kaidonis and Moerman, 2009). Many studies have presented criticisms of this economic rationalisation (Zhang, 2004; Wang, 2010). For example, in *The Closing Circle*, Commoner (1971, p.7) states that "nature knows best" and suggests that due to lack of comprehensive understanding, human intervention in a natural ecosystem should be kept minimal. These views are echoed in *Wolf Totem*.

The role of the Chinese government towards the Chinese banking sector can be imagined as equivalent to that of the humans in the grassland ecosystem. However, a key difference is that active management and regulation from government is commonly needed for the development of industrial sectors. Just as in *Wolf Totem*, human management of an ecosystem is needed to ensure its dynamic stability and integrity. Mongolians planned their hunting, a fundamental aspect of Mongolian tribal life. However, they did not excessively hunt any species, regardless of whether these animals were perceived to be harmful for the wellbeing of livestock. For example, in Chapter 17 Jiang (2008) reflected on a debate between Mongolian elders and Han officials concerning whether a hunt for wolves needed to be organised to reduce the loss of lambs due to wolf attacks. One of the Mongolian nomads aggressively expressed his concern, saying that "the wolves are responsible for losses (of lambs), but if you wipe them out, the absence of those losses will prove catastrophic." (Jiang, 2008, p.250) Again, the Mongolians saw the relationship between wolves and livestock in an ecosystem perspective, rather than reducing wolves to mere causes of livestock loss. Similarly, Commoner (1971) states that the key reason that the environment-damaging technologies have been developed and implemented is the shortage of systems thinking in decision-making, where humankind has become "accustomed to think of separate, singular events dependent upon a unique, singular cause. But in the ecosphere every effect is also a cause" (p.5). Hence, it is apparent that the lack of systems thinking in the Han immigrants' grassland management was the key contributing factor to the later ecological crises narrated in *Wolf Totem*.

Thus, the human metaphor implies that the relationship between the Chinese government and Chinese banking sector is complicated, due to the complexities of state-ownership, the regulatory role of government and mandated policies requesting Chinese banks to fulfil certain objectives issued by the state (Berger, Hasan and Zhou, 2009; Huang, Cortese and Pepper, 2012). In an earlier investigation of the relationship between state policy and Chinese banks' disclosure of sustainability performance, state-owned banks and policy banks were shown to emphasise their commitment to state policies in a much more significant manner compared to joint-stock and foreign-owned banks (Huang, Cortese and Pepper, 2012). This can be explained in terms of the "Wolf Totem" metaphor: where sheep and dogs are domesticated and dependent on humans for survival, and gazelles and goats are relatively more independent. Hence a metaphor that considers the government as representative of humans in an ecosystem is relevant, as the government's behaviour fundamentally influences the balance and stability of the ecosystem in the form of the banking sector. As mentioned in Chapter Two, the China Banking Regulatory Commission is the authoritative government agency that oversees the Chinese banking sector. Therefore, this research will identify the influence from the China Banking Regulatory Commission on the banks' sustainability reporting, and hence evaluating whether the China Banking Regulatory Commission acted in a human-like role to govern and control banking institutions and how its influences impacted banks' sustainability performances.

More importantly, Jiang (2008) considers that the reason Mongolian nomads were able to maintain a stable and harmonious grassland ecosystem was their ability to balance all species within it. “Chen Zhen concluded that the herdsmen were experts at striking a balance, weighing the pros and cons of each animal, and accommodating them in the calibration so that the least harm and greatest benefits were achieved. The herders were superb at utilising the strong points of every animal in the grassland” (Jiang, 2008, p.115). Thus, the use of “Wolf Totem” metaphor for sustainability, and the human metaphor for regulatory bodies of the Chinese banking sector, aims to communicate that striking a balance and calibrate all different types of banks in the sector is essential for the overall wellbeing of the Chinese banking sector.

6.3.6 A Wolf Metaphor for a Competitive Market Environment

Cultural differences significantly affect perceptions of and metaphorical representation of wolves. In traditional Chinese culture, wolves are generally associated with very negative meanings. Many Chinese idioms constructed using a wolf symbol “狼”are related to despicable behaviours (for example, “声名狼藉” is a Chinese idiom to describe a disreputable person, with a literal meaning that someone’s reputation is as bad as a wolf). This is also seen in Western culture: the famous folk tale *Little Red Riding Hood* portrays the wolf as an extremely dangerous, manipulative, cunning and predatory creature who will take advantage of an innocent child. Furthermore, many mythical creations in Western culture depict the wolf’s nature as evil and cruel, comparing them with monstrous creatures.

However, some cultures also express appreciation of wolf characteristics. In some stories (both Chinese and English) wolves are portrayed as guardians of children (for example, in the story of the twins *Romulus and Remus*, who were suckled by a wolf), in more recent artistic displays, wolves are portrayed as an enhanced and dignified wild form of dogs and represent a vivid symbol of nature (an example is the film *Dances with Wolves*). In a more culture-specific context, Native Americans and Mongolians have worshipped wolves as having been sent to protect them, hence; their perceptions of wolves are very positive, highlighting traits such as their power, courage and divinity (Swann, 1983; Jiang, 2008). In both Native American and Mongolian cultures, wolf has been used as powerful totem/emblem for the tribal people.

Wolf Totem educates readers about the powerful spiritual and symbolic value wolves have in the Mongolian nomad culture. To Mongolians, wolves not only represent important traits their culture values, but also are a symbol of the worshiped heavenly spirit (Tengger) that governs every aspect of Mongolian life. More importantly, with the development of the story in *Wolf Totem*, the wolf and its totemic power disappears from Mongolian life as the result of cultural invasion. The impact is severe; Jiang (2008) writes of negative experiences in many aspects of the Mongolian nomadic lifestyle, including environmental crises and homogenisation of culture. Hence the later sections of this research discuss why the wolf (and the competitive spirit it represents) could be a missing element, causing imbalance in both literally, in the Mongolian grasslands, and metaphorically, in the Chinese banking sector.

When Jiang wrote *Wolf Totem*, one of the purposes the author had was to influence the Chinese society with the idea of a “wolf culture”, where competition, democracy, and freedom were fought for and respected (Jiang, 2008, p.266). To him, the grasslands of wild wolves provided vitality and enriched spiritual life for humans, where humans needed to respect and learn from those who respected wolves. Towards the end of the book, Jiang (2008) defines the meaning of *Wolf Totem*: "wolf totem, the soul of the grassland, the symbol of the grassland people's free and indomitable spirit" (p.524). According to Glodblatt, the translator of *Wolf Totem*, Jiang considers the wolf culture as "an antidote for what ails Chinese society", a society that Jiang compares with sheep (Translator's notes, as cited in Jiang, 2008).

As outlined in Chapter Two of this thesis, it was noted that the banking sector faces both opportunities for development and threats to its own survival, from both domestic and international competition, which continues to intensify (Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009; Wang, 2010). The state-owned Chinese banks, which account for nearly half of the entire Chinese banking sector, lack efficiency and competitiveness to overcome challenges from legitimate future competition (Wang, 2010). If the state-owned banks fail, the Chinese banking sector will be severely harmed, with the consequential financial and social cost difficult to control (especially considering the lessons learned from the Global Financial Crisis). It is important, therefore, for the Chinese banking sector, particularly the state-owned banks, to regain competitive capacity.

Drawing on the role of wolves in the grassland ecosystem, this research considers that a "wolf culture" could also potentially bring vitality into the Chinese banking sector. The ideas of competition and freedom that Jiang (2008) discussed in *Wolf Totem* also have relevance in the context of the future development of the Chinese banking sector. Due to the complexity of China's current social system, and the fact that the reformation and regulation of the Chinese banking sector is still under way

(Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009; Wang, 2010), a free, competitive, and democratic Chinese banking sector will not be easily attained. Moreover, whether the capitalist, free-market perspective of competition is the optimum arrangement for the Chinese banking sector within the current Chinese context remain questionable. However, as *Wolf Totem* asserts, natural competition results in better results for all species. Hence, the current competition environment in the Chinese banking sector needs to be maintained and further strengthened, rather than controlled or minimised as the Chinese government has historically done.

The progressive privatisation for Chinese banks, especially the state-owned banks, may be an effective approach for Chinese banks to become more competitive. As Barton (2005) suggests, privatisation of public-sector organisations and reforming their operations according to market concepts of competition will enhance their efficiency. Similarly, Andrew (2007) acknowledges that public firms' adoption of market-oriented profit motives helps to define these firms' accountability. Although state-owned Chinese banks are not typical public-sector organisations, before privatisation they suffered from a complete lack of accountability due to their state-ownership status. With progressively more private ownership, particularly foreign ownership, it is expected that these banks will have a greater capacity for competition (Berger, Hasan and Zhou, 2009; Liang, Xu and Jiraporn, 2013; Jiang, Yao and Feng, 2013).

In summary, this research aims to demonstrate the mapping of metaphors to the Chinese banking sector. Different animals in *Wolf Totem* are used as metaphors for different types of Chinese banks, describing the bank's unique roles and characteristics. Moreover, the human in *Wolf Totem* is considered to have a similar, and very important role as the Chinese government's regulative control of the Chinese banking sector. Different approaches (Mongolians nomads' and Han immigrants'), as well as their consequences, are discussed to elaborate the challenges in decision-making in relation to the management of the Chinese banking sector, and to promote systems thinking in the decision-making process to minimise unintended negative consequences. Lastly, the chapter evaluates the importance of enhancing competition for the development of the Chinese banking sector, suggesting that progressive privatisation and reform could be necessary for the current, less-competitive Chinese banking sector.

Using keywords that resemble the animal metaphorical concepts, this research examines whether the banks' sustainability reports contain disclosures that can be linked with its portrayed roles and characteristics in the Chinese banking "ecosystem". By using keyword search, sections that contain relevant information are identified in the banks' sustainability reports. Then, both quantitative (page count and financial ratios) and qualitative (quotes and messages) are extracted and summarised to formulate discussions whether certain metaphorical attributes can be observed. This research only uses two basic quantitative measurements to mitigate the issue of conducting analysis of English versus Non-English text. Due to limitation of data, English sustainability reports were not available for every year and every bank between 2008 and 2012. However as observed in Bank of China's issuance of both Chinese and English versions of sustainability reports, the length of report, and the length of every individual sections, are identical for both versions. Therefore, using number of pages as a quantitative indicator for conducting content analysis in this research can largely reduce the potential bias caused by comparing

English and non-English reports. In addition, the disclosure of financial figures and ratios are in numerical forms, hence it makes little difference whether the report is in English or Chinese in which the numerical data is extracted. To further reduces potential risks of misinterpreting information, only English direct quotes are extracted from the reports as supportive evidences of metaphorical resemblance.

6.4 Providing Narratives using Metaphorical Interpretation

In addition to imposing the multi-layered "Wolf Totem" metaphor, another essential feature of this research is to comprehend the Chinese banking sector's sustainability reporting practices through providing metaphorical interpretations. More specifically, this research applies metaphor to interpret the observable trends and features in the Chinese banks' disclosure of sustainability performances using the setting of *Wolf Totem* as a contextual background.

As Neuman (2006) states, an interpretivist approach aims to understand and describe meaningful social action, researchers who embrace this approach create new meanings and are expected to make sense of their words. The interpretivist's epistemological assumption is that knowledge is socially constructed through interpretations based on human experiences and emotions (Chua, 1986; Neuman, 2006; Deegan, 2014; Slabon, Richards and Dennen, 2014). This research relies on the researcher's experiences and reflections on both the novel and the Chinese banking sector. The credibility of this research relies on how well the new understandings that this research aims to provide will be accepted.

The interpretivist approach and the application of metaphors are not two mutually exclusive domains: rather, conceptual and cognitive linkages can be identified between them. For instance, Lander (2000) states that reading and writing a qualitative study can be considered as a re-metaphoring process. Usher, Bryant and Johnson (1997, p.223) explain that "narrativity links the idea of authorship to that of agency, i.e., the researcher as an active teller of plausible tales of discovery and invention". The potential benefits of providing a metaphorical narrative is that new metaphors allow a researcher to promote new understandings and facilitate the combination of pre-existing and new metaphors so that there will never be a lack of various perceptions (Frye, 1992).

Narrative has been broadly studied in accounting research (Smith and Taffler, 1992; Llewellyn, 1999; Milne and Chan, 1999; Haynes, 2006; Beattie, 2014). However, as Llewellyn (1999) states, narratives (such as interview transcripts, chairman letters, discretionary disclosures in business reports) are often used as research inputs rather than outputs. The relatively few studies using narratives as outputs display similar features, working on the basis that "[They] use narratives to ground their theoretical arguments. These arguments are not grand theories (or law-like global teleologies) they are localised little stories" (Llewellyn, 1999, p.221). Compared to calculative modes of thinking, which are capable of providing an objective description of social phenomena, narratives focus more on bringing a different perspective to the viewing of things (Barry and Elmes, 1997). Thus, it can be seen that narratives (as outputs) and metaphors have similar potential to defamiliarise things.

The way this research combines the application of metaphor and narratives as output is an attempt to provide a convincing and coherent narrative, which Llewellyn (1999) considers essential to overcoming narrative's limitation of lacking credibility. Barry and Elmes (1997, p.434) clearly state the trade-off between credibility and power of defamiliarising, that "extremely credible narratives tend towards the mundanely familiar, whereas highly defamiliarising narratives often lack credibility (at least when first introduced)". As a solution, providing a convincing narrative can "confirm our prior expectations and surprise us by combining elements of the ordinary with the strange" (Llewellyn, 1999, p.224). Moreover, a coherent story is built by linking the researched data with the theoretical understanding of the researcher, as "including what is relevant (judged against the constructed story) and excluding what is irrelevant creates a linked and unified story" (Llewellyn, 1999, p.225). Similarly, the application of metaphor "is simultaneously a choice about the features to highlight and the features to ignore" (Young, 2013, p.883). Again, it can be seen that metaphors are effective tools to construct narratives, as they highlight only the relevant features of the primary objects.

Moreover, Ricoeur (1979) indicates that as a powerful figure of speech, metaphor has the capacity beyond defamiliarising social phenomenon; rather, it has the power to actually remake reality. "Metaphor's power of reorganising our perception of things develops from transposition of an entire 'realm'. Consider, for example, sound in the visual order. To speak of the sonority of a painting is no longer to move about an isolated predicate, but to bring about the incursion of an entire realm into alien territory" (Ricoeur, 1979, p.236). What this research endeavours to accomplish is to provide a meaningful and intuitive perception and reflection on the resemblances between two dissimilar domains: in this case, ecosystem thinking and accounting discourse and practices. This approach is an exploratory attempt to facilitate the metaphorical interpretation process and provide narratives as research outputs in the field of accounting research.

By using the "Wolf Totem" metaphor and the established analytical framework (Table 7), this research views the complex Chinese banking sector from the ecosystem perspective. By providing an investigation of sustainability reports issued by various banks operating in the Chinese banking sector, this research aims to provide some insights on what is essential for the Chinese banking sector's sustainability.

6.5 Sample Selection and Profiles

To effect the metaphorical transfer described in Section 6.3, sustainability reports from ten banks operating in China were selected as the sample for this research, across the period 2008 to 2012:

1) The four major state-owned commercial banks (Bank of China, Industrial and Commercial Bank of China, Agricultural Bank of China and China Construction Bank). All of the "Big Four" of Chinese banks were selected for their distinctive trade specialisations.
2) Three of the 12 joint-stock commercial banks in China were selected (China Merchant Bank, Industrial Bank of China and Shanghai Pudong Development Bank). The China Merchant Bank and the Shanghai Pudong Development Bank are the two largest joint-stock Chinese banks. The Industrial Bank of China was selected because it is the sole Chinese signatory of the *Equator Principles*, which may influence its sustainability reporting.
3) One out of the three policy banks (China Development Bank) was selected, as the other two policy banks' sustainability reports are incomplete in the period 2008 to 2012. The Agricultural Development Bank of China issued its first sustainability report in 2013 and it covers the timeframe of 2004 to 2013. The Export-Import Bank of China only uses its web portal to communicate

sustainability performances and did not issue sustainability reports during the period of this study.

4) Two foreign banks (the HSBC China and the Standard Chartered Bank China) were studied to investigate whether a full foreign-ownership makes any difference in disclosure. They were selected because the parent banks of both are founding signatories of the *Equator Principles*, and both have a history of providing standalone sustainability reports. Although as of 2012, there were 412 foreign-owned financial institutions in China already (China Banking Regulatory Commission, 2012), only these two foreign banks had an asset size comparable with the other major banks in China. PricewaterhouseCoopers (2013) reports that in 2012 the HSBC China ranked 23rd and the Standard Chartered Bank China ranked 29th in the Chinese banking sector measured by total assets. No other foreign banks were among the top 50. Therefore, these two banks are selected as key representatives for the foreign-owned banks in China.

This research investigates the standalone sustainability reports issued by these ten banks rather than using annual reports for several reasons. First, as previous outlined in Chapter Four, the sustainability reporting practice in China can be considered as being mandatory rather than voluntary (Noronha et al., 2013; Ioannou and Serafeim, 2016). Therefore, the Chinese banks' standalone sustainability reports likely contain a sufficient volume of sustainability-related disclosure. Second, in the earlier era when standalone sustainability reporting is not a common practice, researchers often studied annual reports to identify relative importance of sustainability disclosures. However as suggested by Unerman (2000), exclusive focus on annual reports often leads to an incomplete picture of sustainability reporting practices. There have been more researches in recent time that focus on the sustainability reports (for example, see: Kolk, 2008; Dilling, 2010; O'Dwyer, Owen and Unerman, 2011). Thus, the selection of standalone sustainability reports over annual reports can better fulfil this research's objective – to make sense of Chinese banks' sustainability reporting.

In addition to the brief outline of the banks' features and characteristics in Chapter Two of this thesis, some information on each of the sample banks is provided in the following section.

6.5.1 State-owned Banks

Established in 1912 in Beijing, the Bank of China (BOC) is the oldest bank in mainland China and once acted as the central bank. It is the eighth-largest bank in the world by market capitalisation (fourth-largest in China), and has the greatest international presence among Chinese banks, with its branches operating in 37 countries outside China (Bank of China, 2012). The bank was previously wholly owned by the central government of China via the Central Huijin Investment Ltd (hereafter referred as Huijin)[20] (中央汇金投资有限责任公司) and the National Council for Social Security Fund (SSF)[21] (全国社保基金理事会) on the behalf of the State Council of China. In 2006, following its listing on the Hong Kong Stock Exchange in January and in Shanghai A Stock Exchange in July, the Bank of China made an

[20] The Central Huijin Investment Ltd is a Chinese investment company established to allow that the Chinese government can act as a shareholder for the state-owned banks. Its shareholder rights in the state-owned banks in China are exercised by the State Council of China (Central Huijin Investment Ltd, 2014).

[21] The National Council for Social Security Fund is the social security strategic reserve established by the Central Committee of the Communist Party of China and the State Council of China for the purpose of managing assets and fiscal allocation of pension fund and public welfare (National Council for Social Security Fund, 2014).

initial public offering (IPO) in both markets. The state ownership of the Bank of China after both IPOs decreased to approximately 70 percent, where it has remained (Chinaview, 2006; Bank of China, 2012, p.64). At present, the Bank of China is the second-largest lender in the Chinese financial sector, and the majority of its business is concentrated in foreign-exchange lending.

The Industrial and Commercial Bank of China (ICBC) was founded in 1984, and has become the world's second-largest bank by market capitalisation (first in China) and world's largest bank by total asset (RMB 19 trillion, or USD 3 trillion). Similar to Bank of China, the Industrial and Commercial Bank of China was listed on both the Hong Kong Stock Exchange and the Shanghai A Stock Exchange in 2006 through one of the largest IPOs at the time (Bremner, 2006). Huijin and the China Ministry Finance are the control shareholders, with each initially holding up to 33.81 percent of the Industrial and Commercial Bank of China's total market capital. The figure now is 35.30 percent, indicating the state control of the bank remained firm (Industrial and Commercial Bank of China, 2014). The Industrial and Commercial Bank of China has relatively higher foreign ownerships (through a consortium comprised of foreign financial-service companies, including the Goldman Saches Group, Allianz Group and the American Express Company); these foreign investors are Industrial and Commercial Bank of China's strategic partners, with the aim of improving its business operations and, strengthening the bank's corporate governance and risk management (Allen et al., 2011). The Industrial and Commercial Bank of China is the largest lender in China; its main business-lending customers are the manufacturing, transportation, and telecommunication sectors in China.

The Agricultural Bank of China (ABC) was founded in 1951 in Beijing through the merger of the Farmers Bank of China and the Cooperation Bank. Following several reforms, the Agricultural Bank of China today was reestablished in 1979 as a limited holding company via a restructuring process. In 2014, the Agricultural Bank of China was ranked sixth in the world and third among Chinese banks in terms of market capitalisation. As its name suggests, the Agricultural Bank of China's main focus is providing banking services to rural areas and agricultural businesses and individuals. Its operation is tightly linked to the Chinese government's "Three Rural Issues" ("三农") policies: supporting agricultural activities, improving the life of farmers, and the developing of rural areas of China. Thus, the Agricultural Bank of China has more than 23,500 branches (the broadest spread of branches across China)the most of any Chinese banks, and employs the most people (Agricultural Bank of China, 2014). It was the last Chinese state-owned bank to be listed on the stock market, as it conducted IPOs on both the Hong Kong and Shanghai stock exchanges in 2010. To date, the Agricultural Bank of China has a higher level of state control than other state-owned banks, with Huijin, National Council for Social Security Fund and the Ministry of Finance holding more than 82 percent of its share capital (Agricultural Bank of China, 2014).

The last of the four state-owned banks studied in this research is the China Construction Bank (CCB). It was founded in 1954, and in 2014 was ranked the second-largest bank in China and fourth-largest in the world in terms of market capitalisation. As the bank's name suggests, it specialises in infrastructure loans and residential mortgages. Its listing on the Hong Kong Stock Exchange was the earliest among Chinese state-owned banks in 2005, and was followed by its listing on the

Shanghai exchange in 2007. Compared to the other three, China Construction Bank's state ownership is the lowest at 57 percent (by Huijin) as of 2013 (China Construction Bank, 2013); also, the Hong Kong Exchange and Clearing Company (HKSCC) Nominees Limited holds up to 29 percent of shares as a block investor, and represents foreign ownership in the bank.

6.5.2 Policy Bank

As stated in Chapter Two, there are three policy banks in China: the Agricultural Development Bank (ADBC), the Export-Import Bank of China (CHEXIM) and the China Development Bank (CDB). Among the three, China Development Bank has the largest asset size, and is the second-largest bond issuer in China after the Ministry of Finance; this is the bank examined in this research. At present, CDB has 35 branches across China providing financing for state projects including infrastructure, basic industries, energy, and transportation. It is wholly owned by the Chines government, the Ministry of Finance (50.18 percent), Huijin (47.63 percent) and National Council for Social Security Fund (2.19 percent) are its only shareholders (China Development Bank, 2013). Policy banks do not offer banking services to private citizens; their roles are unique, and they are only accountable to the central government of China.

6.5.3 Joint-stock Banks

The China Merchant Bank (CMB) is the largest Chinese joint-stock bank and the twenty-sixth largest bank in the world. It is a young bank, founded in 1987, and is headquartered in Shenzhen in the south of China. The China Merchant Bank has been listed on the Shanghai Stock Exchange since 2002, followed by listing on the Hong Kong Stock Exchange in 2006. HKSCC Nominees Limited holds almost all China Merchant Bank's foreign listed shares, which account for approximately 18 percent of the total capital. The rest of the capital is common shares, held by a number of state-owned and non-state-owned firms. The six state-owned firms and legal persons in its the top ten shareholders account for nearly 28 percent of the total capital.

The Industrial Bank of China (CIB) is ranked nine positions down from the China Merchant Bank on the list of the world's largest banks at thirty-fifth, and the fourth-largest Chinese joint-stock bank. It was established in 1988 in Fuzhou, Fujian Province. It has been listed in Shanghai A Stock Exchange since 2007; this is its only listing, but its ownership has more spread than that of the China Merchant Bank (Industrial Bank of China, 2012). Local authorities are, as a group, the largest stockholders, controlling approximately 18 percent of total equities (through the Financial Bureau of Fujian Province). HSBC is the largest foreign shareholder, with nearly 11 percent of total capital. All other block holders hold less than five percent.

Lastly, Shanghai Pudong Development Bank (SPD) is the youngest joint-stock bank included in this research. Established in 1993 through an IPO on the Shanghai Stock Exchange, the Shanghai Pudong Development Bank exists to provide financial services for the development of Pudong district, building Shanghai into an international financial hub and to contributing to the national economic development. Currently its market capitalisation is at thirty-eighth in the world and tenth in Chinese banks (and fifth among the Chinese joint-stock banks). The bank's top two shareholders are state-owned firms China Mobile Group and Shanghai International Group; each holding about 20 percent of total equity. There are no other significant block share owners (Shanghai Pudong Development Bank, 2012).

6.5.4 Foreign Banks

The number of foreign banks in China has grown significantly, particularly since China's entry into the World Trade Organization (WTO) in 2002, rising from 188 in 2004 to more than 900 in 2012 (China Banking Regulatory Commission, 2012). Although the total asset size of foreign banks in China has also grown during this period, the relative proportion as percentage of total Chinese banking sector assets has slipped to as low as 1.78 percent in 2012 (China Banking Regulatory Commission, 2012). Prior to entering the World Trade Organization, China had placed many client restrictions on foreign banks; however, the government has loosened these restrictions progressively (including licenses to provide foreign-currency business and local-currency business) to open China's domestic financial service sector to foreign competition (Wildau, 2014).

Among the foreign banks operating in China, HSBC (China) Company Limited (HSBCC) has the largest service network with more than 170 branches and outlets in China (HSBCC, 2012). It is a wholly owned subsidiary of the Hong Kong-based HSBC Co. Ltd. HSBC's first China mainland branch was opened in Shanghai in 1865, and HSBCC was incorporated in 2007, making HSBCC the first foreign bank to incorporate locally in mainland China. The Standard Chartered Bank (China) Ltd (SCBC) has a very similar background, beginning with its first Shanghai branch in 1858; SCBC was also locally incorporated in 2007. As of 2014 it has a total of 104 branches and outlets in China (Standard Chartered Bank (China) Ltd, 2014).

Like other foreign banks, both HSBCC and SCBC have endured the era where the Chinese government placed tough restrictions on the operation of foreign banks in China, circumscribing their profitability and abilities to innovate (PricewaterhouseCoopers, 2014). However, both banks' competitive strength should not be overlooked. At end of 2013, HSBCC and SCBC were ranked in top 30 Chinese banks measured by the total Tier One Capital, and in top 40 by total assets (PricewaterhouseCoopers, 2014). With the continuing internationalisation of the Chinese currency and anticipated changes in banking policy and regulations, as well as the evolving economic paradigm, foreign banks are expected to be able to seek diverse opportunities in the Chinese banking sector in the near future (PricewaterhouseCoopers, 2014). Thus, changes in the foreign banks' strategy as well as products and services are expected.

This chapter has outlined how the two-stage approach will be implemented in this research, and established the metaphorical analytical framework to conduct the content analysis and provide interpretive narrations. The next chapter presents the results of the content analysis and demonstrates how narrations are used to comprehend the observed findings.

Chapter Seven: Results and Discussions of the Narrative Analysis

> Since the *Opinions of China Banking Regulatory Commission on Strengthening Social Responsibilities of Banking Institutions* was issued at the end of 2007, the CBRC has actively encouraged and urged banking institutions to assume their social responsibilities. With the joint efforts of the CBRC and banking institutions, the banking sector has developed a strong sense of social responsibility and further improved its behaviour as a responsible corporate citizen.
>
> - China Banking Regulatory Commission (2008, p.102)

In the previous chapter, the two-stage research design was outlined. Summative content analysis using a "Wolf Totem" themed analytical framework and metaphorical narrative were introduced as the two key components of this research. This chapter presents the results of the content analysis, and discusses how narratives can be used to explain the observed trends and features by linking banks and their metaphorical concepts.

7.1 General Characteristics of Sample Banks' Sustainability Reports

As outlined in the previous chapter, sustainability reports of ten banks operating in China are analysed to study the banks' characteristics and identifying relevant matters in their reports that are coherent to the corresponding metaphorical concepts. Table 8 provides an overview of some of the general characteristics as observed in the sample banks' sustainability reports, including the length of the report (measured by the total number of pages), language in which the report is issued (Chinese, English or both), whether an auditing firm is commissioned to provide assurance of the sustainability report and whether the Global Reporting Initiative (GRI) framework is adopted to prepare the report. Identified trends are discussed in the following subsections.

Table 8: General Characteristics of the Sample Banks' Sustainability Reports

Year	Report Characteristics	Banks									
		State-Owned Banks				Policy Bank	Joint-Stock Banks			Foreign Banks	
		BOC	ABC	ICBC	CCB	CDB	XingYe (CIB)	SPD	CMB	HSBCC	SCBC
2008	Length (pages)	76	121	124	143	63	17	50	53	32	58
	Language	Bilingual (S)	Bilingual (C-Es)	Bilingial (I)	Bilingual (I)	Bilingual (I)	Chinese	Chinese	Chinese	Bilingual (I)	Chinese
	Auditor	DNV	N//A	DNV	KPMG	DNV	N/A	DNV	N/A	N/A	N/A
	GRI	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes
2009	Length (pages)	84	124	124	143	122	60	38	30	27	16
	Language	Bilingual (S)	Bilingual (C-Es)	Bilingual (I)	Bilingual (I)	Bilingual (I)	Chinese	Binlingual (S)	Chinese	Bilingual (I)	Chinese
	Auditor	DNV	N/A	EY	KPMG	EY	N/A	N/A	N/A	N/A	N/A
	GRI	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
2010	Length (pages)	65	142	124	152	73	114	36	40	24	16
	Language	Bilingual (S)	Bilingual (I)	Bilingual (I)	Bilingual (I)	Bilingual (I)	Chinese	Binlingual (S)	Chinese	Bilingual (I)	Chinese
	Auditor	PWC	Deloitte	EY	KPMG	PWC	N/A	N/A	N/A	N/A	N/A
	GRI	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
2011	Length (pages)	59	130	124	131	81	89	36	54	23	16
	Language	Chinese	Bilingual (I)	Bilingual (I)	Bilingual (I)	Bilingual (I)	Chinese	Binlingual (S)	Chinese	Bilingual (I)	Chinese
	Auditor	PWC	Deloitte	EY	PWC	PWC	N/A	PWC	Bureau Veritas	N/A	N/A
	GRI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2012	Length (pages)	74	122	147	131	162	75	44	70	23	16
	Language	Chinese	Bilingual (S)	Bilingual (I)	Bilingual (I)	Bilingual (I)	Chinese	Binlingual (S)	Bilingual (I)	Bilingual (I)	Chinese
	Auditor	PWC	Deloitte	EY	PWC	PWC	N/A	PWC	Bureau Veritas	N/A	N/A
	GRI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* Bilingual (S) indicates the banks issues separate Chinese and English reports. Bilingual (C-Es) indicates the bank provides a report mainly in Chinese with a condensed English summary. Bilingual (I) indicates the bank issues an integrated Chinese/English report, with full English translation provided for all Chinese content.

7.1.1 Report Length

As shown in Table 8, the sample banks' sustainability reports vary in total number of pages. The average length of the sustainability reports issued by the same type of banks is shown in Table 9.

Table 9: Average Length of Sustainability Report by Type of Banks

Year	Average Length of Sustainability Report (number of pages)			
	State-owned Bank	Policy Bank	Joint-stock Bank	Foreign Bank
2008	116	63	40	45
2009	119	122	43	22
2010	121	73	63	20
2011	111	81	60	20
2012	119	162	63	20

The results in Table 9 indicate that on average, the Chinese state-owned banks' sustainability reports are much longer than those of the joint-stock banks and foreign banks. Despite the fact that as a policy bank, the China Development Bank does not participate in commercial lending, it does provide a sustainability report comparable in length to those of the state-owned banks. Based on Belkaoui and Karpik's (1989) finding that increased actual sustainability commitment can lead to larger volume in sustainability reporting, it can be suggested that the Chinese state-owned banks and policy banks are more committed to broader sustainability issues than other types of banks. This is similar to the "Wolf Totem" themed metaphor framework and its propositions, where sheep (state-owned banks) and dogs (policy banks) contribute largely to the wellbeing of both the humans and non-human species in the grassland ecosystem.

7.1.2 Reporting Language

In terms of reporting language, the four state-owned banks, the policy bank and one of the two foreign-owned banks (HSBCC) provide bilingual sustainability reports, with the exception of Bank of China, which discontinued English sustainability reports between 2011 to 2013[22]. It is not surprising that these four major banks provide detailed English-language sustainability disclosure due to their global presence and operations. In comparison, the three joint-stock banks have a much lower level of global penetration. China Merchant Bank reports that only in 2008 did the bank establish its first global branch in New York (2008, p.2); Shanghai Pudong Development Bank and Industrial Bank of China had no branches outside China in 2008.

Although the main role of policy banks is to support domestic Chinese state-owned banks in providing loans to other Chinese state-owned enterprises (Lin and Zhang, 2009), China Development Bank does provide sustainability disclosure in both Chinese and English. As revealed in its 2008 sustainability report, China Development Bank cooperates with overseas financial institutions in more than 70 countries. Additionally, the bank leads the Chinese banking sector in foreign currency loans, with its 64.47bn US Dollar overseas outstanding loans (China Development Bank, 2008, p.23). Despite the common understanding that policy banks are established by the state government of China to support national development strategies, the finding indicates that China Development Bank is involved in both Chinese domestic and international financial market.

The two foreign-owned banks take a different approach to sustainability reporting in China. HSBC (China) provides a bilingual report focusing on its operation in China

[22] The Bank of China (BOC) did not provide English-language sustainability reports between 2011-2013; after 2014 it resumed issuing separate English reports. (The bank's CSR portal, http://www.boc.cn/en/aboutboc/boccsr/, does not have 2011-2013 English reports). However, no particular reason has been provided by the bank for either the cessation or the resumption of English-language reporting.

(as the host nation). In contrast, Standard Chartered Bank (China)'s sustainability report is not China-focused; rather, it is a Chinese version of the parent company's global-level sustainability report. This suggests that Standard Chartered Bank (China) does not find it necessary to provide a sustainability report just for its operation in Chinese market[23]. The difference between how HSBC (China) and Standard Chartered Bank (China) provide sustainability reports in China shows that the two firms took different approaches when conducting business in China; HSBC (China) is more locally responsive while Standard Chartered Bank (China) follows its home-country procedures. Kolk et al. (2010) reported similar findings when analysing sustainability reports issued by Chinese domestic and foreign retail firms', indicating that while to an extent foreign firms often mirror home practices, some do adapt themselves to the specific cultural and economic contexts of their host country.

7.1.2 Assurance of Sustainability Report

As Table 8 shows, the number of banks commissioning assurance services for sustainability reports progressively increased between 2008 and 2012. In 2008, only the state-owned banks and policy bank provided assurances for their sustainability reports, indicating that the bank's financial resource strength could be an important influence on whether assurances are provided for sustainability disclosure. This is consistent with early findings that internal resources and capabilities are underlying factors for business firms to do so (Perago and Kolk, 2012). At the end of 2012, seven out of the eight Chinese domestic banks in the sample provided audited

[23] Similar findings are observed in the bank's web sites. For example, although the Standard Chartered Bank does have a Chinese web portal (http://www.sc.com/cn/), the link "可持续发展计划" for sustainability-related content is hyperlinked to English-language content (https://www.sc.com/en/sustainability/).

sustainability reports, suggesting there that is pressure for Chinese banks to adopt sustainability reporting assurance.

Previous studies confirm that larger firms, particularly multi-national enterprises (e.g. Fortune Global 250 firms) often commission sustainability reporting assurance services as a means to access organisational legitimacy through the credibility of assurance and verification practices (Park and Brorson, 2005; Kolk and Perego, 2010; Hodge, Subramaniam and Stewart, 2009; Manetti and Becatti, 2009; O'Dwyer, Owen and Unerman, 2011; Perego and Kolk, 2012). In contrast, firms that hesitate to adopt sustainability assurance practices point to the high associated cost and their lack of confidence that third-party assurance leads to enhanced legitimacy as the main reasons for the non-adoption (Park and Brorson, 2005). Although the concept of legitimate business identity in China is different to the Western understanding (Carlisle and Flynn, 2005; Ahlstrom and Bruton, 2001; Li, Yang and Yue, 2007), the fact that Chinese banks increasingly subscribe to sustainability report assurance shows that these banks consider perceived credibility of sustainability reporting to be important.

7.1.3 GRI Adoption

The results in Table 8 also indicate that the adoption of the GRI guidelines in Chinese banks' sustainability reports was low at the beginning of the 2008-2012 period. However, by 2012, GRI all ten sample banks' sustainability reports used GRI guidelines as a framework.

Noronha et al. (2013) suggest the existence of alternative systematic rules and regulations in China, which uniquely represent the Chinese context of sustainability reporting (e.g. Shanghai Stock Exchange's *Guidelines on CSR notice and*

Environmental Disclosure). Despite suggestions that GRI is the most relevant institution in the sustainability context (Moneva, Archel and Correa, 2006), not all Chinese banks adopted the framework in the early stages of sustainability reporting. However, as Nikolaeva and Bicho (2011) suggest, intensified competition and increased media pressure will result in higher levels of GRI adoption, and the adoption process will eventually become more institutionalised. The result in Table 9 indicates that Chinese banks broadly adopted the GRI guidelines in 2012 (in conjunction with Chinese domestic guidelines and frameworks) as a framework to prepare sustainability reports, suggesting that the Chinese banks face more competition and media exposure in 2012 than they did in 2008.

From these general characteristics, it can be seen that the Chinese banks have increased their commitment to providing sustainability reports, leading to better quality of the reports (based on overall growth in reporting length measured by number of pages and more assurances provided) and a certain degree of institutionalisation (based on the availability of bilingual reports and the broader adoption of GRI guidelines). To further investigate the sample banks' sustainability reports, this research uses the metaphorical analytical framework established in Chapter Six to analyse the banks' reports based on different types of ownership and their characteristics.

7.2 State-owned Banks and the Metaphor Narrative for "Sheep"

As discussed in Chapter Six, the sheep metaphor is often associated with negative attributes such as submissiveness, obedience and weakness. These attributes have conceptual similarities with criticism of state-owned banks including that they suffer from non-performing loan (NPL) burdens, continuous support national policies and inefficient management. This research seeks disclosures in relation to these particular matters in the four state-owned banks' sustainability reports.

7.2.1 Providing Loans to State-Projects and Non-Performing Loans (NPL)

Previous studies indicate that the state-owned banks' NPL burden is a historical problem for China since the political reform in the 1980's and the consequential closure and liquidation of many state-owned enterprises in various sectors (Podpiera, 2006; Garcia-Herrero, Gavila and Santabarbara, 2009). According to Lardy (1998, p.83-84), more than 80 percent of all loans issued by the "Big Four" Chinese state-owned banks were made to state-owned enterprises at end of 1995, and these loans are often found to be doubtful and to have become non-performing loans. These non-performing loans cause financial fragility and undercapitalisation, which endanger the sustainability of both state-owned banks and the Chinese macro-economy (Bonin and Huang, 2001). This research investigates the four state-owned banks' disclosure of state loans and the impact on NPLs in their sustainability reports, results shown in Table 10.

Table 10: State-owned Banks' Disclosure of State-oriented Loans and Impact on NPL

"Sheep are Submissive"			2008	2009	2010	2011	2012
Disclosures in relation to state-related loans and non-performing loan ratio	Non-performing loan ratio disclosed in sustainability report	**BOC**	2.65%	1.52%	1.10%	1.00%	0.95%
		ICBC	2.29%	1.54%	1.08%	0.94%	0.85%
		ABC	4.32%	2.91%	2.03%	1.55%	1.33%
		CCB	2.21%	1.50%	1.14%	1.09%	0.99%
		JSB Average*	1.65%	1.04%	0.78%	1.13%	1.01%
		FOB Average*	0.58%	1.01%	0.66%	0.45%	0.55%
	Number of pages containing disclosure regarding loans made to state projects and enterprises	**BOC**	3	4	4	2	3
		ICBC	2	4	4	5	6
		ABC	6	10	6	5	7
		CCB	9	8	6	5	6
	Disclosed loans amount made to state projects and enterprises (in bn USD)	**BOC**	68.52	84.46	104.87	59.39	61.49
		ICBC	N/A	151.63	131.55	125.99	138.4
		ABC	58.03	N/A	N/A	N/A	90.92
		CCB	27.47	51.12	N/A	31.94	N/A

* The average non-performing loan ratio for joint-stock banks (JSB) and foreign-owned Banks (FOB) is provided by China Banking Regulatory Commission (CBRC) in its annual report (2008; 2009; 2010; 2011; 2012).

As shown in Table 10, explicit narrative disclosures were observed in state-owned banks' sustainability reports in relation to state-project loans. For example, the Bank of China reveals that the bank will continue to support Chinese enterprises to expand to overseas: "In 2009, BOC stepped up credit support for the 'Going Global' Chinese enterprises, particularly in resource industries such as iron and steel, nonferrous metal, petrochemical and electric power, becoming the major banking partner for a number of Sinopec, CNOOC, Huaneng and Yanzhou Coal Mining's 'Going Global' projects" (Bank of China, 2009, p.30). Similarly, the Agricultural Bank of China (2012, p.50) reveals that "in 2012, ABC granted various loans totaling RMB 100billion (USD 15.88billion) to the railway industry and issued various railway bonds with a balance of over RMB 50billion (USD 7.94billion) in support of construction of railway infrastructure, railway transportation and purchase of locomotives”. These borrower firms are solely state-owned or functioning as state-authorised investment organisations. The ongoing relationship between state-owned banks and other Chinese state-owned enterprises is transparently observable in these banks’ sustainability reports, showing that state-owned banks must still fulfill a duty to grant loans to state-owned enterprises in various national projects. Moreover, all state-owned banks disclose state-project loans information under similar headings, such as “Supporting the Sound Development of Real Economy” (Agricultural Bank of China, 2012) and “Supporting the Strategic Key Industries of the State” (Industrial and Commercial Bank of China, 2011). In addition, all state-owned banks provide considerable information in this matter, based on the number of pages in their sustainability reports that concern these loans. The state-owned banks’ explicit narratives reveal that they are still directed by the state government of China to support the financial needs of the Chinese state-owned enterprises in other sectors to benefit the overall growth of the economy.

Although the disclosure of quantitative data in relation to state loans is not available in all the reports, where possible, reported loan amounts are shown in Table 10. Only the Bank of China disclosed full loan amount for each year; other banks’ data are less clear. For example, the Agricultural Bank of China (2009, p.109) indicates that the bank does provide state-related loans in more than 30 provinces in China across industrial sectors and infrastructure construction; however, the actual loan amount is not disclosed. Based on the available data, in 2009 three state-owned banks increased their state-related loans. This trend is due to the Chinese government’s expansionary fiscal policy in response to the Global Financial Crisis, as since 2009 Chinese commercial banks have extended credits to support government infrastructure projects as part of an economic stimulus package (China Banking Regulatory Commission, 2008; 2009; Yu, 2010). Although the disclosure in the sustainability reports is incomplete, the results do provide some evidence that the Chinese state-owned banks still need to fulfil responsibilities to fund state projects and enterprises, and that these responsibilities are considered by these state-owned banks as important indicators in sustainability performances.

The change in non-performing loan ratios shown in Table 10, suggest that the state-owned banks were able to reduce their non-performing loan burdens progressively. In 2012, three out of the four state-owned banks achieved a lower non-performing loan ratio than the average for Chinese joint-stock banks (but still higher than the average for the foreign banks). This result is favorable for the state-owned banks' economic viability, as non-performing loans are considered the main threats to Chinese state-owned banks' operation and competitive efficiency (Bonin and Huang, 2001; Shi, 2005; Berger, Hasan and Zhou, 2009). However, the state-owned banks do not provide detailed disclosure in their sustainability reports on how the lower non-performing loan ratio is achieved. For example, the Industrial and Commercial Bank of China (2008, p.37) states that "the bank exited from loans of RMB 108.7billion (USD 15.39billion) with potential risks, recovered and disposed non-performing loans of RMB 59.6billion (USD 8.44billion), reducing the balance of non-performing loans by RMB 7.29billion (USD 1.03billion)". However, there is no other information about how the doubtful debts were disposed of. Similar patterns are observed in other state-owned banks' sustainability reports. This indicates that although non-performing loans are an important indicator of Chinese state-owned banks' sustainability, the banks choose to report a mere ratio rather than reveal supporting information in their sustainability reports, possibility due to the sensitivity of this kind of information.

Earlier studies have outlined that in order to reduce Chinese state-owned banks' non-performing loan burden, the Ministry of Finance of China established four asset management corporations (AMCs), one for each of the "Big Four" state-owned banks (Greatwall Co. for the Agricultural Bank of China, Orient Co. for the Bank of China, China Huarong for the Industrial and Commercial Bank of China, and China Cinda for the China Construction Bank), to purchase non-performing loans from the state-owned banks (Berger, Hasan and Zhou, 2009; "Lipstick on a pig", 2013). An estimated two trillions RMB (approximately USD 283billion) worth of non-performing loans have been transferred from Chinese state-owned banks to asset management corporations at end of 2004 (Berger, Hasan and Zhou, 2009; "Lipstick on a pig", 2013). Bonin and Huang (2001) explain that asset management corporations are expected to collect non-performing loans or repackage and sell the loans at discounted value on secondary market. However, there is no publicly available data for these asset management corporations, as the *Economist* ("Lenders of little resort", 2013, p.1) states: "Chinese Asset Management Corporations have not released proper accounts". Therefore, although the state-owned banks report a declining non-performing loan ratios from 2008-2012, there is a possibility that the decline is due to the government's intervention through asset management corporations which have progressively transferred out the accumulated non-performing loans. Based on the available information in state-owned banks' sustainability reports, it can be suggested that Chinese state-owned banks must still provide funding to state projects to fulfill their commitment towards sustainability, although these loans are more likely to become non-performing.

7.2.2 Supporting State Policies

In the earlier discussions (Section 7.2.1) concerning the state-owned banks' disclosure of non-performing and state-related loans, it was stated that state-owned banks regard financially supporting other state-owned enterprises as an important sustainability objective, under state policies. This research further investigates whether the state-owned banks consistently make similar disclosures in relation to other state policies.

Through the analysis of five years of sustainability reports, this research finds that Chinese state-owned banks addressed eight important policies as required by the China Banking Regulatory Commission. As an example, the China Banking Regulatory Commission (2009, p.44) states:

> In 2009, the CBRC continued its guidance on banks' credit activities with a view to enabling sound and sustainable economic development. Specifically, credit support was provided to the national key projects, small enterprises, rural development, construction of affordable houses, major science and technology projects, and projects for energy saving and pollution reduction.

These policies are closely related to the development objectives of the banking sector and Chinese economy. These state-oriented policies have important influences on the state-owned banks' operations, mandating and guiding the banks to focus on certain areas by extending credit support to particular policies.

- **“Three Rural Issues”:** The phrase (in Chinese “三农”) refers to the three key issues of China’s rural development as highlighted by President Hu Jintao and Premier Minister Wen Jiabao since 2001 (Lin and Wong, 2012): developing agriculture, developing rural areas and improving farmers’ wellbeing. The state-owned banks’ duty to support the “Three Rural Issues” policy includes expanding their rural banking divisions, providing county-level scale financing to agriculture and other rural industries, issuing micro-loans to rural households and continuously extending credit to the rural sectors (China Banking Regulatory Commission, 2008).
- **Supporting Key Industry:** As observable in every sustainability report from the state-owned banks, they attach significant importance to the state policy aimed at optimisation and transformation of China’s economic and industrial structure. Following China’s economic stimulation plan which defined the key sectors including infrastructure construction, railways, energy, telecommunication and petroleum, the China Banking Regulatory Commission continuously emphasises that state-owned banks need to support the development of these important “pillar industries” (Cull and Xu, 2003; China Banking Regulatory Commission, 2008; 2009; 2010; 2011; 2012).
- **“Going Global”:** The “Going Global” strategy (in Chinese “走出去”) is the Chinese government’s ongoing strategy to encourage Chinese enterprises to expand their operation and investment to overseas markets. This policy influences Chinese banks’ operations in a political way, pushing them to expand their services to an international level and extend credit to enterprises abroad. The China Banking Regulatory Commission (2009, p.38) defines “Going Global”

as part of the development strategy in the opening up of Chinese banking sector, and emphases that it is necessary for Chinese banks to expand internationally to keep pace with economic and financial globalisation. The state-owned banks pioneered the process by establishing more than 80 branches in foreign countries (China Banking Regulatory Commission, 2009; 2010).

- **Supporting Regional Development:** China has experienced imbalanced economic development between its Eastern coastal regions and Western inland regions since the 1979 economic reform (Bao et al., 2002; Tao et al., 2010). To help the lagging Western region, the State Council of China developed the *Western Regional Development Program* in 2000 (Lai, 2002). China Banking Regulatory Commission clearly indicates that Chinese banks need to support regional development by increasing their geographic presence in Western regional areas and providing financial support to regional development projects (2008; 2009; 2010; 2011; 2012). For example, China Banking Regulatory Commission (2012, pp.57-58) states:

  > [I]n 2012, the CBRC guided banking institutions to actively improve the unbalanced distribution of credit resources between the economically under-developed regions and the developed regions… By the end of 2012, the loan balance of banking institutions for China's central and western regions witnessed 4.1 percentage points higher than that of the eastern region.

- **Supporting SMEs:** The Chinese government has emphasised the development of small-to-medium enterprises (SMEs) since 2006 (Singh, Garg and Deshmukh, 2009). Since then, the China Banking Regulatory Commission has continued to urge banks to provide ongoing support to SMEs (2008; 2009; 2010; 2011; 2012). For example, in 2009 the China Banking Regulatory Commission issued the *Guidance of the CBRC and the Ministry of Science and Technology on*

Extending Credit Support to High-tech SMEs, requesting banks to optimise credit structures and strengthen credit support to qualified SMEs on the preconditions of effective risk prevention (China Banking Regulatory Commission, 2009).

- **Supporting Education:** In 2005 the State Council of China promoted the *National Strategic Development Plan2006-2010*. As part of the educational modernisation project, the State Council promoted a vision of "rejuvenating China through science and education" (Wang, 2005). The China Banking Regulatory Commission issued a number of notices, including *Rules for Commercial Student Loans* and *Notice of China Banking Regulatory Commission on Implementing the Rules Governing Student Loan Management* to promote a policy of providing low-interest student loans to support economically disadvantaged university students (China Banking Regulatory Commission, 2008, p.129; 2009, p.90).
- **Supporting Housing:** The China Banking Regulatory Commission has indicated that it cooperates with the Ministry of Housing and Urban-Rural Development and the People's Bank of China to provide ongoing support to the growth of the real-estate sector (2008). In particular, in 2008 it issued the *Notice of the People's Bank of China and China Banking Regulatory Commission on Implementing the Rules Governing Development Loans for Affordable Housing*, setting rules on interest rates, maturity, and deposit requirements to encourage banks to support affordable house construction and consumption.
- **"Green Credit":** As outlined in Chapter Two, the *Green Credit* policy can be considered as the counterpart of the *Equator Principles* in China. China Banking Regulatory Commission (2008; 2009; 2010; 2011; 2012) requires banking

institutions to adjust their loan portfolio in favour of green credit, requiring banks to limit credit to industries that are working to overcapacity or operating with outdated facilities, consuming more energy or showing a record of environment pollution. For example, the China Banking Regulatory Commission (2012, p.47-48) states:

> [I]n 2012, the CBRC released *Notice on Issuing the Green Credit Guidelines* to improve the statistical rules and examination indicator system for green credit, investigate the loan status of enterprises violating the regulations on environmental protection and issue warning signals to relevant banks.

Table 11 summarises the quantitative and qualitative measurements of content related to state policy in the Chinese state-owned banks' sustainability reports, including number of pages used and whether a particular policy is addressed (indicated by the "Y" symbol).

The data in Table 11 shows that all state-owned banks spend considerable effort to discharge information regarding their commitment to carrying out state policy. At the beginning of the period 2008-2012, each state-owned bank was committed to some of these policies, but by the end the state-owned banks had begun addressing all state policies. This finding suggests there is a degree of institutional isomorphism, possibly due to coercive and mimetic pressures causing the state-owned banks to adopt a similar approach to address state policies in their sustainability reports (DiMaggio and Powell, 1983). Overall, the volume of disclosure (measured by number of pages) continuously increased during the period. In general, the state-owned banks increased their disclosure of state policy to demonstrate their support for the Chinese government's various policies to enhance economic development and social wellbeing.

Table 11: State-owned Banks' Disclosure on Supporting the State Policies

"Sheep Are Obedient"			2008	2009	2010	2011	2012
State-owned banks' disclosures on supporting the state government policies	Number of pages used to disclose supporting of state policies	**BOC**	4	7	10	6	10
		ICBC	10	8	17	12	14
		ABC	12	21	24	26	34
		CCB	6	9	17	16	20
	"Three Rural Issues"	**BOC**			Y	Y	Y
		ICBC		Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y
	Supporting key industries	**BOC**	Y	Y	Y	Y	Y
		ICBC	Y	Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y
	"Going Global"	**BOC**	Y	Y	Y	Y	Y
		ICBC			Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB		Y	Y	Y	Y
	Supporting regional development	**BOC**		Y	Y	Y	Y
		ICBC	Y	Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB			Y	Y	Y
	Supporting SMEs	**BOC**	Y	Y	Y	Y	Y
		ICBC	Y	Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y
	Supporting education	**BOC**	Y	Y	Y	Y	Y
		ICBC	Y	Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y
	Supporting housing	**BOC**		Y	Y	Y	Y
		ICBC			Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y
	"Green Credit"	**BOC**	Y	Y	Y	Y	Y
		ICBC	Y	Y	Y	Y	Y
		ABC	Y	Y	Y	Y	Y
		CCB	Y	Y	Y	Y	Y

The finding that all state policies have been addressed by state-owned banks suggests that although each of these banks has its specialisation, they have progressively diversified their services into broader areas in response to the China Banking Regulatory Commission's guidelines to fulfil state policies. In their report, the state-owned banks provide explicit disclosures to emphasise their commitment. For instance, the China Construction Bank (2007, p.74) outlines, "Although CCB does not possess strong service capacity for agriculture, rural area and farmers, it is actively exploring, building on risk control, developments in these areas to provide satisfactory services for the diversified financial needs in rural areas". Then in the next year, the China Construction Bank reports "we have found new ways of providing services to farmers, the farming industry and to rural areas" (2008, p.76). Similarly, the Bank of China and the Industrial and Commercial Bank of China also extended their services to support "Three Rural Issues" and started to disclose related information in their sustainability reports. Similar observations are found regarding disclosures related to the "Going Global" policy. It was expected that the Bank of China would be the pioneer in this, due to its expertise in international exchange and financing. However, the other three state-owned banks have also shown their commitment to providing international services as part of sustainability performance and commitment to state policy. The Industrial and Commercial Bank of China even exceeded the Bank of China in global expansion as of 2012, claiming:

> [W]e carried out the government's opening up strategy, and steadily expanded our platform of overseas entities to extend to 39 countries and regions with a total of 383 branches, forming a global service network across Asia, Africa, Latin America, Europe, America and Australia, becoming the Chinese bank with the largest overseas network (Industrial and Commercial Bank of China, 2012, p.4).

Providing support to Chinese small-to-medium enterprises (SMEs) is a key policy that all Chinese state-banks emphasised, as seen in each year's reports from all four state-owned banks. As the Bank of China (2008) highlights, the provision of SME funding is different to financing state projects, as SME funding requests tend to be frequent, short-term, and urgent, and thus require a different suite of services. As observed in the sustainability reports, all state-owned banks report that they have taken considerations with the importance of funding SMEs, providing products such as supply-chain finance, inventory pledges, property and equipment mortgages and option finances.

The *Green Credit* policy resulted in considerable amounts of disclosure in state-owned banks' sustainability reports. All banks emphasised their commitment to becoming a green bank, continuously disclosed how the policy was being implemented as guidelines for operation, and reported related performance measures. In addition, all state-owned banks used numerous case studies to illustrate green policy implementation. For instance, the Industrial and Commercial Bank of China (2012, p.68) provided a case study on the bank's rejection of a loan application made by an ammonium phosphate production project in Shaanxi Province, based on the bank's green credit review's finding on the contamination effect. Thus, although none of the Chinese state-owned banks is a signatory to the *Equator Principles*, they have adopted the *Green Credit* as a means of practicing environmentally responsible lending.

Therefore, it is quite clear that China Banking Regulatory Commission's guidance on supporting state policies is an essential influential factor for the state-owned banks' disclosure of sustainability performances. As the metaphorical analytical framework proposed, the state-owned banks' disclosure of performance related top state policy shows the obedience attribute embodied in the sheep metaphor.

7.2.3 Profitability Indicators and Efficiency

Previous research often criticises state-owned banks as less efficient (Berger, Hasan and Zhou, 2009; Yao et al., 2007; Luo et al., 2011); however, more recent findings suggest when diseconomies of scale are controlled, the state-owned banks do outperform other banks in China (Zhang and Wang, 2014; Wang et al., 2014). The financial approach to sophisticatedly measure bank efficiency involves the use of modelling techniques such as the Data Envelopment Analysis (DEA) or the Parametric Approach Measurement (SDA) (for example, see: Chen, Skully and Brown, 2005; Wang et al, 2014). However, the application of these models requires data outside the scope of sustainability reports. For the purpose of this research, the analysis is based on available information of the state-owned banks' sustainability reports related to bank efficiency, mainly in the form of financial ratios used to measure profitability. Table 12 summarises key profitability financial indicators as reported in the four state-owned banks' sustainability reports during 2008-2012:

Based on the trends in the data presented in Table 12, despite concerns about the operating efficiency of Chinese state-owned banks, they achieved improved operational efficiency, as shown by universal increase in operating revenue, profit after tax, return on equity, and return on assets from 2008 to 2012.

Table 12: State-owned Banks' Profitability Ratios (as Reported in Sustainability Reports 2008-2012)

"Sheep are Weak"			2008	2009	2010	2011	2012
Profitability ratios reported in state-owned bank's sustainability reports	Operating revenue (bn USD)	**BOC**	32.31	34.01	41.28	50.94	58.43
		ICBC	43.90	45.32	56.77	73.04	84.53
		ABC	Not disclosed in sustainability report				
		CCB	37.86	39.14	48.24	61.63	N/A
	Profit after tax (bn USD)	**BOC**	9.21	12.50	16.36	20.23	23.22
		ICBC	15.74	18.95	24.75	32.35	38.09
		ABC	7.28	9.52	14.15	18.93	23.16
		CCB	13.11	15.65	20.13	26.30	30.90
	ROE	**BOC**	14.23%	16.44%	18.87%	18.27%	18.10%
		ICBC	19.43%	20.15%	22.79%	23.44%	23.02%
		ABC	N/A	20.53%	22.49%	20.46%	20.74%
		CCB	20.68%	20.87%	22.61%	22.51%	N/A
	ROA	**BOC**	1.00%	1.09%	1.14%	1.17%	1.19%
		ICBC	1.21%	1.20%	1.32%	1.44%	1.45%
		ABC	0.84%	0.84%	0.99%	1.11%	1.16%
		CCB	1.31%	1.24%	1.32%	1.47%	1.47%

Although the limited data from the sustainability reports only provides a partial and unsophisticated view of the state-owned banks' efficiency, when compared to recent research findings, the results are consistent with previous findings that Chinese state-owned banks can improve their efficiency when the burden of non-performing loans is reduced (Avkiran, 2011; Berger, Hasan and Zhou, 2010). For example, the Agricultural Bank of China's profitability ratios are lower relative to the other three state-owned banks, and at the same time it has the highest non-performing loan ratio (Table 10). This finding is consistent with the suggestion that non-performing loans are the fundamental impediment for bank efficiency (Berger, Hasan and Zhou, 2009; Luo et al., 2011). As Wang et al. (2014) state, the disposal of non-performing loans has led to state-owned banks' improved efficiency and profit-earning ability. This research also finds that the state-owned banks' reported profitability grows with their decline of non-performing loan ratio.

7.2.4 Metaphor Narrative for "Sheep"

Based on the result of summative content analysis focusing on relevant disclosures in the four state-owned banks' sustainability reports (Tables 8-10), this research argues that the state-owned banks' characteristics can be expressed using the sheep metaphor. As the cornerstone of the Chinese banking sector, the state-owned banks commit themselves to providing extensive disclosures to show that they continuously provide financial aid to state-owned firms in other important Chinese industrial sectors under state direction, as means of fulfilling their sustainability and other objectives. Their doing so is consistent with sheep's submissive and obedient nature. These findings also show the important role of Chinese state-owned banks in the Chinese banking sector and economy. Their extensive disclosure of sustainability commitments and performances show that they contribute to many aspects of the sustainability of the Chinese society at large, very similar how sheep contribute to the wellbeing of the grassland ecosystem.

This research also finds that the China Banking Regulatory Commission, which plays the same role as does the human in the grassland ecosystem, tightly controls these sheep-like state-owned banks by providing guidance on their operation so they can better fulfil their responsibilities. From an ecosystem perspective, sheep as domestic animals are subject to human control and intervention. The finding that state-owned banks' disclosure of sustainability performance is largely responsive to the China Banking Regulatory Commission's requirements further shows the importance of government intervention in the Chinese banking sector.

The observed growth in profitability reported by the Chinese state-owned banks is a favourable outcome for the Chinese banking sector. As observed, the sheep-like state-owned banks experienced growth in 2008-2012, becoming more profitable and efficient. Although the Chinese state-owned banks are still responsible for providing risky loans to state enterprises and other national projects, they maintained growth and appeared to become more economically viable. In *Wolf Totem*, the Mongolian nomads were able to maintain steady, self-replenishing numbers of sheep livestock through active control mechanisms. When balancing the two conflicting objectives - enhancing quality of living and maintaining ecosystem harmony and integrity - the Mongolian nomads prioritised the grassland ecosystem by living a self-sufficient, simple life. But when Han immigrants with political power to control the grasslands entered the ecosystem, they were forced to rapidly increase sheep livestock beyond the capacity of the grassland to fulfil needs from other regions of China. Thus, although the state-owned banks grew rapidly during 2008-2012, from an ecosystem thinking perspective, this outcome can also be negative for the Chinese banking sector if the growth rate is unnatural. Analysis of state-owned banks' sustainability reports suggests that their lending commitments are needed in many other sectors in China. Therefore, the state-owned banks could be in the same situation as Mongolian sheep during the Cultural Revolution: that their growth is enforced by human controllers to ensure that other political priorities are satisfied.

7.3 Policy Banks and the Metaphor Narrative for "Dogs"

Previous studies on the Chinese banking sector often exclude policy banks (for example, see: Lin and Zhang, 2009; Berger, Hasan and Zhou, 2009; Foo and Witkowska, 2014; Wang et al., 2014) due to the consideration that policy banks are unique, and hence it is irrelevant to compare their performances or efficiency with those of Chinese commercial banks. However, policy banks are a crucial part of the Chinese banking sector, and their sustainability is also essential to the overall health of the sector. The China Development Bank has issued large, audited, bilingual sustainability reports every year from 2008 to 2012, even though the bank has less need to ensure public acceptance (as it is wholly state-owned and does not provide public business to individuals). This research aims to provide some explanation from the ecosystem perspective for the China Development Bank's motives for making a commitment to sustainability reporting, arguing that its discharge of sustainability responsibility is a display of its dog-like behaviour in the Chinese banking "ecosystem".

The analytical framework outlined in Chapter Six (Table 7) compares policy bank's behaviour with the characteristics of dog: loyalty, protectiveness and a strong dependence, on humans. In a natural environment, and in the story of *Wolf Totem*, dogs are often given the duties of protecting sheep, and being a loyal companion for humans. The evaluation of the dog metaphor for Chinese policy banks is conducted by investigating the content of the China Development Bank's sustainability reports to determine how it define its role to serve national strategies, specifically through extending financial loans to state-oriented projects to reduce state-owned banks' non-performing loans and showing its close relationship with the state government of China.

7.3.1 Serving National Strategies

This research investigates whether the China Development Bank prioritises serving national strategies by examining the extent to which it makes related disclosures and how much emphasis it places on the relationship between serving national strategy and its sustainability performance. Table 13 provides some quantitative and qualitative measurements of how the China Development Bank reported its sustainability commitment to supporting national strategies during 2008-2012. In the company overview, the China Development Bank explicitly defined its role in supporting national strategies. Furthermore, it consistently provided a separate section in the sustainability reports for disclosures of qualitative and quantitative information on how the bank had met the national strategic objectives. In Table 13, the reported content regarding national strategies is compared with state policies as outlined by the China Banking Regulatory Commission, as previously shown in Table 11.

As shown in Table 13, In its sustainability report, the China Development Bank explicitly discloses its commitment to serving national strategies, and why the bank considers it is important to do so. For instance,

> [F]irst, [the bank will] stick to the starting point of serving national development strategies. CDB must incorporate its own development into China's overall expansion and achieve a unity among the multiple goals in national interests, risk prevention and shareholders' returns (China Development Bank, 2010, p.6).

As seen in the narratives in the company's overview, the China Development Bank frequently uses words such as "closely", "earnestly", and "serving" to define its role and highlights its loyalty towards the Chinese government (2008; 2009; 2010; 2011; 2012). Furthermore, as measured by both the number of pages given to national strategy related narrations and their proportion of the total length of the report (more than 50 percent), the China Development Bank provides a large volume of narrations to emphasise that the bank's main function is to serve the country; and this assertion is observable in every sustainability report from 2008 to 2012.

Additionally, by looking at the different key issues emphasised by the China Development Bank to disclose its commitment towards national strategies, it is found that, similar to the trend observed in the sustainability reports issued by the Chinese state-owned banks, the China Development Bank also aligns its sustainability disclosures with state policies. Moreover, in addition to the eight state policies this research identified as important sustainability objectives for the Chinese state-owned banks, the China Development Bank actively engaged in the development of the bond market in the domestic and global economies, and also contributed to the national project on poverty alleviation. In its 2012 sustainability report, which included numerous case studies, the China Development Bank addressed new emerging sustainability issues including social reciprocation and urbanisation, further expanding its commitment towards national strategy and state policies.

Table 13: CDB's Disclosure Regarding Serving National Strategies

	"Dogs are Loyal"	2008	2009	2010	2011	2012
Serving national strategies and state policies	Disclosure on how CDB serves national strategies (in Company Overview)	"CDB earnestly implements the state guidelines and policies, promotes market construction and prior planning through fund financing, raises and guides the flows of domestic and external funds, serves the mid- and long-term national economic development strategies, and provides priority support to the development of infrastructure, basic industries, pillar industries, new technologies, as well as the state key projects".	"CDB has given a forceful boost to the recovery of Chinese economy by responding to the financial crisis on its own initiative and vigorously carrying out the macro-economic control policies. We have continued to put planning above development and channel capital flows via bond markets, and therefore brought into play our cutting edges in medium- and long-term investment and financing".	"By supporting the state macroeconomic control, national combat against the global financial crisis and the transformation of economic development pattern, we have provided sustainable financial support to the implementation of China's mid- and long-term development strategies"	"Closely combine the task of serving national strategies with CDB development, and achieve a unity among national interests, risk control and shareholder returns. Play the indispensable role of a pillar bank in medium- and long-term investment and financing for key projects in the key areas such as infrastructure, basic and pillar industries".	"We stuck to the business strategy of serving national strategies, managing risks and increasing profits, defused hidden risks, and improved our comprehensive risk management system to cover all risks. Moreover, we strengthened institution-building, optimized our risk management system to tackle problems at the root and maintained the safety of CDB assets".
	Number of Pages (proportion of report)	33 pages-> 52%	40 pages -> 33%	48 pages -> 58%	53 pages -> 65%	82 pages -> 51%
	Support national economic development	Y	Y	Y	Y	Y
	Support rural areas	Y	Y	Y	Y	Y
	"Going Global"	Y	Y	Y	Y	Y
	"Three Rural Issues"	Y	Y	Y	Y	Y
	Supporting SMEs	Y	Y	Y	Y	Y
	Supporting Housing	Y	Y	Y	Y	Y
	Supporting Education	Y	Y	Y	Y	Y
	"Green Credit"	Y	Y	Y	Y	Y
	Poverty alleviation	Y	Y	Y	Y	Y
	Development of bond market	Y	Y	Y	Y	Y
	Social reciprocation					Y
	Urbanisation					Y

7.3.2 Funding State Projects and Enterprises in Pillar Industries

As outlined in Chapter Two, policy banks were established as means of protecting Chinese state-owned banks. One of the key indicators is the amount of loans policy banks issue to Chinese state-owned enterprises, as by providing loans to Chinese state-owned firms in key industries, policy banks reduce potential harm to the state-owned banks caused by non-performing loans (Cull and Xu, 2003, Firth et al., 2009). This protective function is essential to the overall objective of restructuring state-owned enterprises in China, which has been a national economic-development priority and an important sustainability performance indicator for policy banks (China Development Bank, 2008; 2009; 2010; 2011; 2012).

The enormous burden placed on the national budget by the increasingly inefficient Chinese state-owned enterprise sector has always been a pressing issue, leading to growing worry on the part of the government and the society as a whole lestthe state-owned banks fail. Among many debated issues contributing to the inefficiency (such as the labour laws and state control of commodity prices), two financial-sector-related issues were also identified: being the continued national subsidisation of stated-owned enterprise financial losses and the much easier access to funding credit (for example, see: Cull and Xu, 2003; Bailey, Huang and Yang, 2012). As previously discussed, the majority of the loans taken out by Chinese state-owned enterprises become non-performing loans; in particular, firms in high energy consumption and polluting sectors contribute greatly to the growing total of non-performing loans borne by the Chinese banking sector (Firth et al., 2009; Chinadaily, 2013).

As mentioned earlier, asset management corporations were established by the Chinese government to deal with state-owned banks’ non-performing loans; however, their effectiveness remains questionable (Bonin and Huang, 2001). As an ultimate solution, the introduction of three Chinese policy banks shows the government's objective to transfer state-owned banks' financial risks to policy banks, as the majority of the non-performing loans are made to state-owned firms in key industrial sectors (Wei and Tang, 1997; Cull and Xu, 2003; Bailey, Huang and Yang, 2012), termed the "Two Basics and One Pillar Sectors" (China Development Bank, 2009, p.37). In contrast to asset management corporations, which buy out the existing non-performing loans from Chinese state-owned banks, policy banks such as the China Development Bank keep Chinese state-owned banks from increasing their non-performing loans in the first place (Cull and Xu, 2003). Funded through the issue of government-secured financial bonds, the three policy banks provide loans covering the main national development projects, focusing on infrastructure and pillar industries (including electricity, coal, highways, post and telecommunication, railways, agriculture and forestry, petroleum, and public unities), as well as agricultural and import and export activities (Naughton, 2007). As the largest policy bank, the China Development Bank is charged supporting China's pillar industrial sectors which (China Development Bank, 2008;2009;2010;2011; 2012). This research investigates the disclosures made by the China Development Bank in relation to providing financial support for the development of these industry sectors, results are shown in Table 14:

Table 14: CDB's Performances in Relations to Loans Made to Key Industrial Sectors

"Dogs protect Sheep"	2008	2009	2010	2011	2012
Total assets (bn USD)	539.57	665.31	761.95	970.45	1200.16
Total outstanding loans (bn USD)	410.26	543.20	672.14	857.70	1024.18
New loans made to pillar industries (bn USD)	108.69	194.65	205.92	216.21	218.64
Outstanding loans in pillar industries (bn USD)	266.71	422.55	513.59	524.45	698.92
Percentage of outstanding loans in pillar industry in total outstanding loans of CDB	65.01%	77.79%	76.41%	61.15%	68.24%
Net profits (bn USD)	2.94	4.67	5.53	7.08	10.07
NPL ratio	0.86%	0.94%	0.68%	0.40%	0.30%
Capital adequacy ratio	11.31%	11.83%	10.87%	10.78%	10.92%

As shown in Table 14, the China Development Bank continuously issued new loans and extended existing loans to the pillar-sector firms, the majority of which are state-owned. Its total outstanding loans in these sectors grew more than twofold between 2008 and 2012. Furthermore, as indicated by the proportion (more than 60 percent and up almost 78 percent) of outstanding loans China Development Bank made to pillar industries relative to its total outstanding loans, supporting pillar industries is the most important financial commitment the bank needs to fulfil in its role as a policy bank. At the same time, the China Development Bank reports a very low non-performing loan ratio and a consistent and satisfactory (greater than 10 percent, as suggested by Meh and Moran, 2010) capital adequacy ratio. These favourable findings indicate that the China Development Bank stands strong financially despite the heavy burden of providing ongoing financial support to pillar industries. The continuing commitment to fund state-enterprises in pillar industries, and thus protect state-owned banks, appears not to be a serious impediment for its own growth, as shown by the declining trend of non-performing loan ratios and its increasing asset size and profitability.

Although, since the economic reform in 1978/1979 Chinese state-owned enterprises have undergone an ongoing process of restructuring and transformation to reduce operational inefficiency and consequential demands on national budgets and loans, the reform is far from being complete (Zhang and Freestone, 2013). As a result, these state-owned enterprises, along with the state-owned banks, may continue to require support and protection until the state sector eventually plays a far less important role in the Chinese economy. Although, as the National Bureau of Statistics China (2012) and the World Bank (2012) suggest, the proportion of state-owned enterprises in all Chinese industrial companies have declined significantly in recent years and their contribution to gross industrial outputs, total industrial assets and employment markets have all falling to historical low, results from the China Development Bank's sustainability reports show that the pillar industrial sectors still require support – and, indeed, that the loan amounts to the sectors is actually increasing. Therefore, much as dogs protected sheep and acted as the primary defence for Mongolians in the grasslands, the policy banks' protective duty remains an essential element for the Chinese banking sector and the overall economy.

7.3.3 Obtaining Funding through Bonds

In *Wolf Totem*, the author describes dogs as fierce animals, yet dependent on humans. Unlike wolves, the majority of dogs in the Inner Mongolian grasslands are domesticated, trained and kept by humans for herding, hunting, and other purposes. Most of their food is also provided by humans. This research draws a comparison between how dogs live in the story of *Wolf Totem* and how policy banks obtain funding for their operations. In contrast to Chinese commercial banks, which access funding through national and private savings, policy banks rely solely on issuing government-secured bonds to gain access to finance (Cull and Xu, 2000; Lin and

Zhang, 2009; Bailey, Huang and Yang, 2012). To meet the pillar sector's growing need for finance, it is expected the policy banks' issuing of bonds also grew substantially. The China Development Bank (2012, p.105) highlights its fundraising success in sustainability report:

> Through bond issuances, we turn scattered, small and short-term deposits into large amounts of long-term capital to satisfy the capital needs of economic development. We also use credit financing and capital market instruments to drive other capital into the country's significant and vulnerable sectors and in the process, we and commercial banks share the work and complement each other with our respective advantages to facilitate the sustainable development of society and the economy.

This disclosure confirms that the bank's fundraising is essential to China's sustainable development overall. This research then analyses how the China Development Bank obtains funding by investigating its bond-issuance disclosure in sustainability reports, results shown in Table 15.

Table 15: CDB's Liabilities, Bonds Outstanding and New Bond Issued (2008-2012)

	2008	2009	2010	2011	2012
Total liabilities (bn USD)	491.51	609.52	701.96	901.33	1077.50
Bond outstanding (bn USD)	394.00	478.69	555.56	694.80	846.17
New bond issued (bn USD)	87.75	95.21	107.31	152.58	191.51
Percentage of outstanding bond in total liabilities	80.16%	78.54%	79.14%	77.09%	78.53%

As Table15 shows, the China Development Bank's total liabilities, total bond outstanding, and annual new issue of bonds continued to grow between 2008 to 2012. Bonds account for the majority of the bank's liabilities (up to 80 percent), indicating that government-secured bonds remain the main way the China Development Bank accesses credit. As part of the firm's sustainability management strategy, the China Development Bank reported that it progressively introduced long-term off-shore RMB bonds through private placement in foreign central banks, and achieved steady growth in this fundraising channel. For instance, the China Development Bank (2012, p106) claimed its issuing of bonds in African central banks as “a milestone transaction and a key step in the RMB’s internationalization”. The results show that in 2012, the China Development Bank was still tightly positioned as a bond-oriented policy bank. The most recent reports on the continuing reform in the Chinese banking sector also revealed that the state government has required China Development Bank to uphold its policy orientation (China Banking Regulatory Commission, 2012).

7.3.4 Metaphor Narrative for “Dogs”

The dog metaphor this research imposes for policy banks can also be used to provide a narrative to comprehend the China Development Bank’s sustainability performance and reporting from an ecosystems perspective. In *Wolf Totem*, dogs are entrusted with important duties to protect sheep; at the same time, the Mongolians ensure their dogs are well fed and, stay strong and fierce so they can fulfil their duties. Thus, in the grassland ecosystem dogs act as a specialised species to ensure the sheep’s wellbeing, and their own condition is shaped by the authoritative specie – humans.

In the period of 2008-2012, the China Development Bank has displayed its doglike characteristics by emphasising its loyalty to the Chinese state government; specially, not only has it increased its efforts to protect state-owned banks (sheep) by continuously providing large amounts in loans to risky pillar industries, but it has also been increasing responsibility for supporting other state policy objectives. Although these burdens are heavy, the China Development Bank manages to develop and stay strong, pursuing its own growth and, reporting improved sustainability performance. The control and intervention mechanism exercised by the Chinese government and particularly its agent, the China Banking Regulatory Commission (which represents the human presence under the metaphor transfer from *Wolf Totem* to the banking sector), is also commonly observed. On one hand the government mandates the China Development Bank to direct its sustainability commitment to designated areas; on the other hand, the government also ensures that the bank's funding is sound guaranteeing the bonds it issues. The close relationship between the China Development Bank and the Chinese government is important to both the bank's wellbeing and the development and sustainability of the Chinese banking sector as a whole.

From the ecosystems thinking perspective, dogs are an important element contributing to the overall balance of the ecosystem. In *Wolf Totem*, the Mongolian nomad's lifestyle would be impossible without their dogs; hence the nomads diligently ensured the dogs' wellbeing and growth. When industrial and agricultural development changed the nomadic lifestyle in the Inner Mongolian grasslands, dogs became less needed and eventually become a less important component of the ecosystem. In contrast, this research's finding that the China Development Bank's extensive disclosure of sustainability performance in 2008-2012 indicates that the function of policy bank is still necessary for the health of the entire Chinese banking sector. Thus, the Chinese government is expected to continuously intervene to ensure the policy bank's sustainability so it can perform its specialised functions.

7.4 Joint-Stock Banks and the Metaphor Narrative for "Gazelles"

As discussed in Chapter Six, the gazelle metaphor used to describe the features of Chinese joint-stock banks and guide the content analysis evolved through three characteristics of gazelles: flexibility, independence, and adaptivity. In *Wolf Totem*, Jiang (2008) praises gazelles for their great ability to survive in the grasslands, and concludes that their level of fitness is shaped by the cruel natural environment and real danger from wolves. These characteristics are compared with joint-stock banks' behaviour as recounted in their sustainability reports.

7.4.1 Improved Profitability and Efficiency

As outlined in the metaphorical analytical framework, gazelles' enhanced flexibility is used as a metaphorical transfer to describe Chinese joint-stock banks' better operational efficiency and profitability. Previous studies confirm that compared to state-owned banks, joint-stock banks often achieve better financial performance, indicating improved efficiencies of both cost and operation management (Chen, Skully and Brown, 2005; Ariff and Luc, 2008; Berger, Hasan and Zhou, 2009; Yao et al., 2007). Similar to the analysis used to evaluate state-owned banks' profitability in Section 7.2.3, the disclosure of profitability and efficiency indicators in sustainability report of three joint-stock banks (China Merchant Bank, Shanghai Pudong Development Bank and Industrial Bank of China)'s and the average of the four state-owned bank reported ratio are summarised and compared, shown in Table16:

Based on the results in Table 16, all three Chinese joint-stock banks studied in this research reported continuous growth in profitability and efficiency. They all achieved increasing operating revenue, profit after tax, return on equity and return on assets in 2008-2012, at the same time reporting a continuously declining non-performing loan ratios. Compared to the performances of the Chinese state-owned banks over the same period, although the joint-stock banks' operating revenue and profit after tax were lower compared to the much larger state-owned banks, their return on equity and return on assets were generally better. This suggests that the three joint-stock banks' outperformed the state-owned banks relative to their size in terms of both profitability and efficiency. The negative correlation between profitability ratios and non-performing loan ratios for both the joint-stock banks and the state-owned banks further demonstrates that non-performing loans hinder Chinese bank's operational efficiency (Avkiran, 2011; Berger, Hasan and Zhou, 2009; 2010).

Table 16: Joint-stock Banks' profitability financial ratios

"Gazelles are flexible"			2008	2009	2010	2011	2012
Joint-stock banks' disclosed financial ratios related to operational efficiency in sustainability reports	Operating revenue (bn USD)	**CMB**	7.83	7.53	10.64	14.93	18.09
		SPD	4.88	5.39	7.44	10.54	13.25
		CIB	4.21	4.79	6.48	9.29	13.98
		SOB Average	38.03	39.49	48.76	61.87	71.48
	Profit after tax (bn USD)	**CMB**	2.40	2.67	3.84	5.61	7.23
		SPD	1.77	1.93	2.86	4.24	5.46
		CIB	1.61	1.95	2.76	3.96	5.54
		SOB Average	11.34	14.16	18.85	24.45	28.84
	ROE	**CMB**	27.41%	21.18%	22.73%	24.17%	24.78%
		SPD	30.03%	25.86%	23.27%	20.07%	20.95%
		CIB	23.22%	24.54%	24.64%	24.67%	26.65%
		SOB Average	18.11%	19.50%	21.69%	21.17%	20.62%
	ROA	**CMB**	1.46%	1.00%	1.15%	1.39%	1.46%
		SPD	1.13%	0.90%	1.01%	1.12%	1.18%
		CIB	1.22%	1.13%	1.16%	1.20%	1.23%
		SOB Average	1.09%	1.09%	1.19%	1.30%	1.32%
	NPL Ratio	**CMB**	1.11%	0.82%	0.68%	0.52%	0.61%
		SPD	1.21%	0.80%	0.51%	0.44%	0.51%
		CIB	0.83%	0.54%	0.42%	0.38%	0.43%
		SOB Average	2.87%	1.87%	1.34%	1.15%	1.03%

The three joint-stock banks' disclosed profitability ratios are consistent with previous studies' findings that joint-stock banks are more efficient than state-owned banks (see Cull and Xu, 2000; Chen et al., 2005; Berger, Hasan and Zhou, 2009). According to these studies, one of the main contributing factors to joint-stock banks' higher efficiency is the relatively lower level of state ownership and the higher accountability and profit-seeking motive enabled through diversified ownership.This leads to the next part of discussion on the characteristic independence of joint-stock bank.

7.4.2 Reducing State Ownership

In the earlier discussion of state-owned banks (sheep), the analysis has shownthe intimacy of the relationship between state-owned banks and the Chinese government. Just as human protection offers sheep a much safer and more comfortable environment, state-owned banks enjoy favourable operational conditions, including government injected capitals and administrated interest rate spread (Berger, Hasan and Zhou, 2009). The *Economist* ("Lipstick on a pig", 2013, p.1) criticises this biased policy protection, asserting "What is more, that vaunted stability has come at a high price. China's policy of financial repression, which forces households to endure artificially low interest rates on bank deposits so that subsidised capital can be lent to SOEs, is a cruel tax on ordinary people." Also, as noted by Yang (2014), such a privilege may lead to undesired outcomes, such as a lower level of awareness of business and financial risks. On the other hand, concentrated state ownership results in tighter government control and intervention, because, as discussed above, the state-owned banks' operation and sustainability objectives are largely under the influence of the China Banking Regulatory Commission (as shown in Table 11). Thus, the commercialisation and privatisation process to reduce state ownership are recognised by both the academics and the Chinese government as means of improving Chinese banks' efficiency (China Banking Regulatory Commission, 2008; 2009; 2010; Cull and Xu, 2000; Chen et al., 2005; Berger, Hasan and Zhou, 2009).

Unlike many other countries, the issuing of shares of Chinese listed companies is restricted by government approval, tacit quota, and limited liquidity (Wang, Xu and

Zhu, 2004; Gul, Kim and Qiu, 2010; Pistor and Xu, 2005). As a result, relatively little information is available from the Chinese banks' sustainability reports providing any indications on changes in state ownership. Other means are needed to identify whether the joint-stock banks' lower level of state ownership can be reflected in their sustainability reports.

The China Banking Regulatory Commission (2008, p.15) states that reducing joint-stock banks' level of state ownership is an objective of the Chinese banking sector reform, by explicitly disclosing that "CBRC made great efforts to promote the development of joint-stock commercial banks by enhancing corporate governance, introducing institutional investors, rebuilding strategic business units based banks and imposing strict capital constraints". Since 2010, the China Banking Regulatory Commission has continuously disclosed the level of private-sector equity participation in Chinese banking institutions. The aggregated equity share maintained by private institutional investors in Chinese joint-stock banks was 8.67 percent as of 2010 (China Banking Regulatory Commission, 2010, p.39), it significantly increased to 42 percent in 2011 (China Banking Regulatory Commission, 2011, p.32), and slightly decreased to 41 percent in 2012 (China Banking Regulatory Commission, 2011, p.44). Furthermore, the China Banking Regulatory Commission issued *Implementation Guidelines on Encouraging and Introducing Private Capital into the Banking Sector* on 26 May 2012, to further promote private-capital involvement in the Chinese banking sector. Based on this information, the reform process has already taken effect in significantly reducing the level of state ownership in Chinese joint-stock banks, and it can be expected that the level of state ownership will be have declined further since 2012.

An analysis of the sustainability reports reveals some differences in how joint-stock banks and state-owned banks define their responsibility towards sustainability and stakeholders. For example, the Bank of China (2009, p.22) defines its concept of sustainability as follows:

> Working together with all stakeholders, the bank will continue to actively implement the policy of the state, serve customers, strengthen corporate governance, promote cultural excellence and support social undertakings so as to push forward the harmonious development of China's economy and society to become a world-class provide of sustainable financial services [emphasis added].

The placement of the state at the forefront of the definition indicates that as a state-owned bank, the Bank of China ranks the state government as the most important stakeholder for its sustainability commitment. In comparison, Shanghai Pudong Development Bank (2009, p.8) places shareholders first:

> The company will fulfil its commitments to such stakeholders as its shareholders, customers, employees, business partners, communities, natural resources and environment to protect and promote the interests of society, to achieve corporate and social and environmental development of the harmonious co-prosperity [emphasis added].

Similar differences can also be observed in how banks disclose their stakeholder engagement. Images 3 and 4 on following pages show how the Industrial and Commercial Bank of China and Shanghai Pudong Development Bank outlined their stakeholder engagement program in their sustainability reports. The Industrial and Commercial Bank placed the Chinese government and regulatory authorities before shareholders on its list of stakeholders, while the Shanghai Pudong Bank did the opposite, ranking customers and shareholders before the government.

Stakeholders Participation

The Bank has devoted itself to the establishment of a clear and effective participation mechanism for its stakeholders. It has clearly defined responsibilities, improved the communication and enhanced the transparency of its operations. The Bank has, through dialogues with stakeholders, established strategic mutual trust with each other, reached consensus on harmonious development, and formed a win-win situation.

	Expectation and needs	Responses of ICBC
Government	Enhance sustainable and sound development of the economy Facilitate the public fiscal plan and serve the development objectives of the government	Earnestly carry out macro-economic policies, optimize resource allocation function, and support the sustainable development of the real economy, support the financial development, stable tax growth and provision of job opportunities for SMEs, agriculture, rural areas and farmers, and ethnic minority regions
Regulatory authorities	Operate in a compliant manner and conduct fair competition Maintain stability of the financial system	Strengthen compliance management, creditworthy operation Improve corporate governance, strengthen development of internal control, and promote the implementation of the New Basel Capital Accord
Shareholders	Gain satisfactory returns and market value Fully understand the operating status of the Bank	Sustain healthy and stable operations, enhance profitability Strengthen investor relation management and ensure timely disclosure of information
Customers	Convenient and efficient financial products and services Comfortable business environment	Develop E-banking, optimize transaction process and innovate products and services Improve service quality, focus on customer experiences, upgrade and restructure branches
Partners	Fair procurement Honesty and mutual benefits	Adopt a fair and transparent procurement mechanism Stick to the principle of equality, mutual benefits and harmony
Employees	Good career planning and development opportunities Complete protection of rights and interests	Carry out human resources enhancement project, optimize employees training system Improve remuneration and incentive, insurance and benefits systems
Communities	Pay attention to community development Safe and healthy living environment	Conduct voluntary activities, help vulnerable groups, participate in social welfare undertakings Ensure safe operation, promote financial knowledge and environmental protection publicity
Environment	Pay close attention to climatic change and support low-carbon economy Advocate energy conservation and emission reduction Establish a conservation-minded society	Promote green credit, E-banking and green financing channels Advocate green office, green procurement, carry out environmental protection and public benefit activities

Image 3:Industrial and Commercial Bank's Disclosure of Stakeholder Engagement (ICBC, 2011, p.23)

Stake-holders

Effective interested parties participation system has been dedicated to set up in order to build strategic creditability and form sustainable common value patterns. So that, the combining value creation ability will be developed and the company's impact to the society and environment will increase and bad influence will decrease and it can create comprehensive economic and social and environment value to a degree as large as possible.

Stake-holders	Responsibility	Company's Response
Customers	Financial Products Innovation Excellent Finance Service Finance Concepts Leading New Financial Experience	Speed up business and financial products innovation to construct modern financial service system Provide all kinds of products Promote customers' satisfactory degree Create value for customers and grow with the customers
Shareholders	Profitability Promotion Standard Operation Strict Risk Management	Build complete corporate management system Reinforce overall risk management by following closely the international and domestic economic situation to keep a stable, healthy and sustainable development on all kinds of business, and bring sustainable profit to shareholders Strengthen information disclosure and pubic relationship management and try hard to enhance the transparency and reputational risk management Run the business legally and standard management operation
Staff	Rights Protection Salaries and Benefits Education Training Personal Development	Ensure the rights of equity and fair employment, and develop staff team diversity Establish and furnish the Worker Representative Meeting System and make sure worker's basic rights protected Enforce the worker's training, complete the evaluation and stimulation system and provide good career develop opportunities Carry out continually the worker satisfactory degree investigation and feedback promptly
Government	Supporting National Macro-control Policy Tax Enlarging Employment	Adjust the loan structure, support the financing in the fields of securing increasing, helping people's livelihood and transforming structure Pay the tax actively Provide working positions to the society

Stake-holders	Responsibility	Company's Response
Environment	Support Low-carbon Economy Construction Support Saving Kind Society Construction	All participation, daily saving and environment protection, promoting green buying and initiate environment protecting welfare Develop strongly the E-bank to enlarge green financial channel Innovate green products and support green credit Build green low-carbon bank thoroughly
Parterres(Suppliers, Insurance, Securities, Funds and other kinds)	Honest Trading Contact Implementation Cooperation Development	Cooperate by the principle of "Open, Fair and Just" Develop by the principle of "Equal, Benefit and Credit"
Community	Fair and Just Society Harmonious and Orderly Society	Organize social welfare activities around assisting study, help the poor, education and environment protection Advocate and develop volunteer's activities, encouraging the staff to participate Develop financial education towards all walks of people
Societies (incl. Environment protection organizations and Welfare charity organization etc.)	Support and Promote the Social Society's Development	Support actively and participate in welfare activities. Establish close relationship with foreign or domestic advanced organizations and enforce communication and study
Media	Accurate, Prompt and Transparent and Interacting Information	Disclose company's information promptly and actively Establish smooth and transparent communication channels Enforce the media role and create healthy and good financial media environment

Image 4:Shanghai Pudong Development Bank's Disclosure of Stakeholder Engagement (SPD, 2010. P.9)

Based on these examples, this research argues that although the sustainability reports issued by Chinese banks provide little information on the level of state ownership, a less concentrated state ownership could result in a bank focusing more on its sustainability commitment towards shareholders than on fulfilling national policies and objectives. Thus, based on the reduced state ownership in joint-stocks as reported by China Banking Regulatory Commission (2010; 2011; 2012), it can be expected the Chinese joint-stock banks can pursue relatively more flexible, less state-driven, objectives in sustainability management and reporting.

7.4.3 Pursuing Innovation and Improving Service Quality

Another characteristic this research will illustrate for the gazelle metaphor is the animal's highly adaptive nature. As the literature outlines, due to less-concentrated ownership and the consequential improvement in governance, profit motives, and accountability, joint-stock banks are likely to commit more resources to in innovative learning and growth, hence enjoying better productivity (Matthews, Zhang and Guo, 2009). The level of innovation is frequently disclosed and emphasised in the joint-stock banks' sustainability reports, showing that these banks are strongly committed to product and service innovation and integration of innovation with their sustainability management.

As an example, Shanghai Pudong Development Bank frequently emphasises its success in product innovation, reports that:

> The bank accelerated innovation, product development and procedure re-engineering. Firstly, it had promoted the innovation system and mechanisms. The company reformed the organizational structure of IT department and Product Innovation Department. The company set up a new business division to be engaged in direct equity fund custody services, Beijing Big Account Services and the Shipping Financing Department, thus laying a solid foundation for the innovation. In 2009, the company made a lot break-throughs. For example, the company <u>was the first Chinese commercial bank</u>

> to establish a database of PE projects and led the industry in green credit. The company was among the first batch of Chinese banks to launch RMB settlement for cross-border trades. Thirdly, the company set up multi-dimensional service network composed of Internet banking, telephone banking, self-service banking, mobile banking and business outlets" (2009, p.7, emphasis added).

The efforts led in 2010 to numerous honours and awards recognising its innovative approach, including Best Green Bank Innovation Award, Global Contact Chinese CSR Model – Excellent Innovation Award, Best Innovation Bank in China Award, and Best Innovation Award selected by the Customer Center in Chinese Bank Sector (Shanghai Pudong Development Bank, 2010).

The China Merchant Bank also reports its success in innovation in each year's sustainability report. For instance, its 2010 reports highlighted that the bank was the first Chinese bank to fully implement Web 2.0 technology and that it had implemented a fully functional interactive, web-based banking service. Moreover, the customers of China Merchant Bank were the first to enter the era of cardless banking, using its I-Wealth service, which has a broad scope of financial services available including net banking, investment analysis and purchase, insurance and wealth management. Through the case study of China Merchant Bank, it was found that the bank not only is committed to innovation to improve its own services, but also advocate innovation in the financial service sector as a whole. The China Merchant Bank disclosed in 2012 (p.11) that it donated RMB 10million (USD 1.6million) to support the first China Innovative Entrepreneurship Contest, held in 2012. The China Merchant Bank also acted as the financial consultant and expert judge in all regional contests. Two hundred enterprises who reached their regional finals would be incorporated in the China Development Bank's 'Wings for 1000 Eagles' enterprise-cultivating plan. Program participants would not only obtain credit from the China Merchant Bank, they would also have the opportunity to obtain equity investment with high-quality PE institutions as well as all dimensional and professional comprehensive financial services. This kind of activity demonstrates the China Merchant Bank's strategic approach to cooperative entrepreneur innovation. Based on the feedback provided by the bank's partners, this approach is very successful not only in improving the service quality offered by both the China Merchant Bank and its partners, but in adding value to local communities and contributing to local development, and hence generating positive impacts to sustainability more broadly. As an example, the Chairman of Shanghai Lonyer Fuels Co. commented that "Banks should not only contribute to the success of customers, but also do more to help those in difficulties in serving customers" (China Merchant Bank, 2012, p.11).

The application of cooperative innovation in financial services is also reported by the Industrial Bank of China. Being the first and (to date) only *Equator Principles* signatory among Chinese banks, it places considerable emphasis in its disclosure on its commitment to supporting and promoting responsible lending principles. The Industrial Bank of China integrates these principles with its innovative approach; for example, it initiated China's first low-carbon themed credit card services (2009), promoting a low-carbon lifestyle to its clients. Furthermore, the bank has also held numerous conferences with the theme of service innovation, inviting financial-services stakeholders to further expand cooperation to gain mutual benefit through innovative value creation (Industrial Bank of China, 2009; 2010; 2011). Compared to the other two joint-stock banks studied in this research, the Industrial Bank of China's sustainability report provides more detail on responsible lending, and includes numerous case studies on topics such as the implementation of the *Equator Principles* in every year's sustainability report. It is clear that the Industrial Bank of China uses the *Equator Principles* as the main basis for its product and service innovations, and a slogan to promote its sustainability philosophy. The bank claims that "as China's first and currently the only Equator Bank, CIB uses the Equator Principles as the starting point, continuously pursuits innovative green finance to achieve development goals: a unified economic, social and environmental harmony, and committed to explore sustainable development and practice" (2012, p.69).

Based on the qualitative narratives observed in the three joint-stock banks' sustainability reports, the banks have undertaken innovative approaches to improve their financial service quality as part of their sustainability management and development goals. Joint-stock banks' discussions on innovation generally strike a balance between promoting national interests (as suggested by the China Banking Regulatory Commission) and achieving competitive advantage.

7.4.4 Metaphor Narrative for "Gazelles"

Unlike sheep, which are well protected by human and dogs, gazelles must face the dangerous wilderness to obtain food. In *Wolf Totem*, by end of the book, the gazelles' living condition had deteriorated due to overhunting by humans and diminished grasslands size due to the burden of over-sized livestock herds. Similarly, compared to state-owned banks, the joint-stock banks must fight harder to remain competitive and to grow. Their asset base is much smaller compared to the state-owned banks, and they are forced to compete in narrower and riskier market segments, as the state-owned banks have occupied the market for enterprise lending (Cull and Xu, 2000; 2003; Firth, Lin and Wong, 2008; Lin and Zhang, 2009). Similarly, the gazelles in the grasslands, which compete with sheep for increasingly limited food resources and safe grassland areas. Under such harsh conditions, gazelles become more agile to be able to move across the Inner Mongolian grasslands as they seek food and water, escaping danger using their velocity and strong sense of danger. Similarly, the comparative profitability analytical results show that the joint-stock banks experienced steady growth in 2008-2012 and continue to develop and compete in the banking sector.

From the ecosystems thinking perspective, gazelles appear to be a minor species in the grassland, compared to the large population of sheep. Through the longitudinal study of the joint-stock banks' sustainability reports, it is clear that although smaller in size and rather limited in resources (compared to the state-owned banks) the joint-stock banks strengthened their market positions in the period of 2008-2012, displaying continuous growth in profitability and efficiency by reducing state-ownership and broadly adopting innovative approach in operational and sustainability management. The gazelle metaphor, which the author of *Wolf Totem* praises for its survival ability in the harsh grassland natural environment, resembles joint-stock banks' improved competitiveness and enhanced efficiency. However, it is noted that the government still exercises a certain degree of control upon the joint-stock banks, as of 2012, the state-ownership share of equity in Chinese joint-stock banks was still as much as 59 percent (China Banking Regulatory Commission, 2012). Thus, joint-stock banks' flexibility is still restricted, and the gazelle metaphor is only relevant when they are compared to the more controllable, sheep-like state-owned banks.

7.5 Foreign Banks and the Metaphor Narrative for "Goats"

Lastly, this research looks at the sustainability reports provided by the two sample foreign-owned banks. The goat metaphor used for foreign-owned banks in China concentrates on behaviours such as being smart, brave, and vigilant (in comparison with sheep); the resemblance is drawn by examining how foreign-owned banks disclose their growth in the sustainability reports, with a focus on identifying their competitive advantages, sustainable strategy management, and implementation of risk management policies.

7.5.1 Inadequate Disclosure of Economic Performances

Foreign-owned firms face tight restrictions when entering the Chinese market, due to political protections enabled by the Chinese government to protect Chinese firms from directly exposure to global competitions (Li, Zhou and Shao, 2009). Therefore, to penetrate the Chinese market, foreign-owned businesses are more likely to invest in less-risky business areas and progressively strengthen their competitive position through offering unique services tailored for the Chinese market (Johnson and Tellis, 2008). Thus, the research examines the two foreign banks' sustainability reports for signs of growth and more-diversified business strategic implementations.

However, the results show otherwise. Not only had both banks revealed minimal economic performance indicators in their standalone sustainability reports, but the amount they revealed declined each year. Standard Chartered Bank (China) issued Chinese versions of its sustainability reports, but these reports disclosed little about their operations in the Chinese banking sector; rather, they were merely Chinese translations of the sustainability reports issued by the parent group. HSBC (China) continued to issue standalone sustainability reports, but kept them very concise. Both foreign banks' sustainability reports contained no disclosure of economic performance indicators such as asset size, profitability ratios, and non-performing loans, although these indicators were frequently disclosed by the state-owned banks, policy bank, and joint-stock banks examined in this research. Rather, these reports focus on social performance, including promoting the bank's charity projects, enhanced workplace conditions and efforts to build a culture of diversity and inclusion. In contrast to the expectation, both foreign banks had little to no discussion in their sustainability reports concerning improving competitive advantage or market expansion.

Although the economic performances were absent from both foreign banks' sustainability reports, other sources have confirmed that foreign banks have suffered economic loss due to the unmet expectations of growth conditions (PricewaterhouseCoopers, 2013; Ernst and Young, 2014). Ernst and Young (2014) clearly states that one of the main reason that the foreign banks did not grow in the Chinese market as expected is the much faster growth speed of the Chinese state-owned banks. It outlines that the anticipated competitive advantage of foreign banks, such as advanced wealth management, net-banking services, and credit card services are rapidly imitated and learnt by the Chinese banks. More importantly, the Global Financial Crisis has caused Chinese banking customers to have negative impressions of the foreign banks (Ernst and Young, 2014).

Thus, in a metaphorical sense, although the "goats" are considered the smarter animals, they could not fully use this advantage to establish their position in the Chinese banking sector "ecosystem". From a different perspective, as told in *Wolf Totem*, the goat has the role of helping shape the overall health of sheep, which is why Mongolian nomads maintain only very small numbers of goats in their herds. As the current condition of the Chinese banking sector reveals, the state-owned banks have benefited through learning from foreign banks and improved significantly in their efficiency and service provision (Hasan and Xie, 2013; Dong, Guariglia and

Hou, 2013). This situation is unfavourable for the future development of foreign banks in the Chinese market, but is favourable for the bigger and domestically significant Chinese state-owned banks. Thus, despite their small size and limited growth, the foreign banks' presence has had a significant impact on the entire Chinese banking sector ecosystem and the Chinese economy holistically.

7.5.2 Limited Opportunity for Growth

In *Wolf Totem*, the author considers the goat to be a brave animal based on his observation that the goats fight against danger (such as wolf assaults), in contrast to sheep's cowardly behaviour. In the metaphorical transfer framework, it was expected that foreign banks would also bravely engage in the intense competition in the Chinese banking sector. However, the results for the two foreign banks are quite different. As mentioned earlier, Standard Chartered Bank (China) stopped issuing standalone sustainability reports for its Chinese subsidiary; rather, the Chinese summary of the bank group's sustainability performance contains some coverage on its Chinese operations, mainly as case studies highlighting the bank's commitment to responsible lending. As an example, the summary of the 2012 Standard Chartered Bank (China) sustainability report stated that the bank group was expanding in Asia, Africa, and the Middle-East; however, the report provided no information on whether its Chinese operation went well (Standard Chartered Bank (China), 2012). One possible reason for this is that the Standard Chartered Bank had not yet considered the Chinese banking sector an important market for expansion, and hence the Chinese subsidiary spent relatively little effort on providing detailed disclosure of its sustainability management and performance.

In contrast, HSBC (China) continued to provide standalone sustainability reports focused on the Chinese market. Moreover, the bank showed confidence in its continued growth, stating in its sustainability report that "HSBC's corporate sustainability strategy seeks to develop commercially viable business opportunities with acceptable returns that have a positive environmental and social impact" (HSBC China,2009, p.5). Based on its sustainability report, HSBC (China) achieved growth in terms of both network expansion and investment. Overall, as its 2012 sustainability report states, the firm maintained a prudent and conservative development strategy to remain sustainable. This research finds that part of the bank's development strategy, as reported in its sustainability reports, is aligned with some of the key state policies as with the Chinese state-owned banks. For instance, HSBC (China) reported that the bank would support the Chinese government's initiative to assist rural areas' development by sponsoring programmes in China's impoverished areas targeting rural finance service, childhood education and SME lending (2009). As another example, HSBC China (2012, p.7) highlighted its effort to support the Chinese government's "Three Rural Issues" policy, indicating that "HSBC was the first foreign bank to expand into the rural areas of China". By the end of 2011, HSBCC had provided RMB 1.4billion (USD 217.3million) in loans to its rural and agricultural clients. According to the firm, "it is a strong embodiment of our commitment to provide services in support of China's policy focus on the 'three rural issues'" (HSBC (China), 2011, p.7).

In contrast to the metaphorical concept's projection of "goats" having a rather fierce nature, the two foreign banks' operations in China appear to be conservative. However, what HSBC China is currently doing to pursue future sustainability can be considered viable strategies, based on PricewaterhouseCoopers's (2013) study of the conditions of foreign banks in China. In the report, PricewaterhouseCoopers (2013) suggests that there are limited opportunities for foreign banks to explore in the Chinese market; the few promising areas are SME lending, specialised lending for key industries, and offering rural banking in support of the Chinese government. HSBC China's sustainability management and reporting showed that the company is moving in these directions. Overall, the conditions for foreign banks to operate in China are still challenging. Although banks such as HSBC (China) endeavour to find areas to grow, the overall wellbeing of foreign banks of China remains quite uncertain. As the Ernst and Young (2013, p.13) report on foreign banks in China concludes:

> Foreign banks continue to chip away at the Chinese financial market. They have followed a steady, consistent approach and have made progress in difficult and often unpredictable market and regulatory circumstances. The prospect of domestic financial reform, RMB internationalization and opening up the capital account, overseas expansion by the big domestic banks, and new innovative pilot schemes may mean we are on the cusp of a new era. However, looking at the market through a foreign banker's lens, as this report purports to do, suggests much will depend on the scope, interpretation, timing, and implementation of the proposed changes.

This reveals that the fate of foreign banks, or the "goats", largely depends on how the Chinese political environment changes in favour of their growth. Using the metaphorical concept, it is evident that the Chinese government plays the pivotal role in the foreign banks' survival and sustainability, just as in *Wolf Totem*, in which the Mongolian nomads kept a very tight control of the number of goats in their livestock, the Chinese government tightly restricts the activities and development of foreign banks.

7.5.3 Emphases on Risk Mitigation and Responsible Lending

The metaphorical analytical framework established in this research draws a comparison between the goat's vigilant nature (highly aware of natural dangers) and foreign banks' sophisticated strategies for risk management and mitigation. This is based on the understanding that these two major global banks have a long history of international competition, compared to the relatively less internationalised Chinese banks. Risk management and mitigation is pivotal to banks' operation, but as the literature suggests, Chinese banks are behind in the implementation of risk-mitigation strategies and hence are potentially more exposed to risks of all kind when competing in a global environment (Berger, Hasan and Zhou, 2009; Matthews, 2013).

In Standard Chartered Bank (China)'s sustainability reports the bank highlights its resilience in the period of 2008-2012 by describing its implementation of a sustainable finance approach and sophisticated risk-management practices, including maintaining high credit quality, upholding cost discipline, and continuing to strengthen the company's balance sheet. Furthermore, the risk-management philosophy in Standard Chartered Bank (China)'s (2009) sustainability review was shown to transcend economic or financial risks; it extends to assessing environmental and social risks such as labour practices, environmental performance, health and safety, and impact on communities. According to Standard Chartered Bank (China) (2009), its approach towards risk management is fundamentally shaped by the *Equator Principles*; as one of the main signatories the bank has fully executed the principle's mandate in its lending practices. After 2009, Standard Chartered Bank (China)'s Chinese sustainability review's length decreased significantly, but the company still provided considerable information in the area of risk management as a main part of its sustainability programme.

HSBC is also a signatory to the *Equator Principles*, and therefore it was not surprising to find that HSBC China also used the framework for managing lending and reputational risk. In 2009 HSBC China stated that risk management was one of the four main aspects of HSBC (China)'s corporate sustainability, claiming that "HSBC prudently manages lending activities that involve the environmental and sensitive areas. The bank conforms with international standards and minimised reputational risks". What HSBC China has done to a greater degree than Standard Chartered Bank (China) is emphasise the unique Chinese context and highlight how this context would affect its risk management: "in addition to implementing sustainable policies, we strictly abide by local policies and regulations. A check list has been made to comprehensively evaluate the environmental risks of lending activities, particularly in the areas of high energy-consumption and high pollution industries" (HSBC China, 2009, p.12). This additional feature in HSBC (China)'s sustainability report shows that compared to Standard Chartered Bank (China), HSBC (China) has more focus on the Chinese market, and aims to be more locally responsive, rather than adopting a standardised global approach when conducting sustainability reporting in China.

It is fair to conclude that both foreign banks have displayed vigilant behaviour, putting a high level of emphasis on risk management and mitigation when conducting sustainability reporting. This finding provides support to the previous discussions on the positive impacts caused of foreign ownership on Chinese firms' corporate governance and accountability (see: Xu and Wang, 1999; Chen et al., 2006, Gul, Kim and Qiu, 2010; Hasan and Xie, 2013). PricewaterhouseCoopers (2013) considers that foreign banks' effective risk-management skills and more sophisticated risk-mitigation procedures could help foreign banks to develop core competencies in niche areas in the Chinese banking sector, such as long-term portfolio wealth management. Assuming that the Chinese banking industry will continue to develop, relevant policies and regulations will continue to be further put in place to achieve financial market discipline, and it is expected that all banks operating in China will need to establish and report on improved risk management (PricewaterhouseCoopers, 2013). However, as of 2012, the foreign banks were still pioneers for risk management and had established some leading practices in this regard.

7.5.3 Metaphor Narrative for "Goats"

The relatively limited information available in the two foreign-owned banks' sustainability report shows that foreign banks are still not able to fully penetrate the Chinese banking sector due to the very strict political barriers favouring Chinese domestic banks. Furthermore, Chinese domestic banks are quick to imitate foreign banks' perceived competitive advantages, benefiting the major players in the Chinese banking sector, particularly the state-owned banks. Foreign banks' future growth and development is an open question, as the Chinese government's control remains tight in this era.

When looked at collectively, the state-owned banks and joint-stock banks are managing to develop and grow while foreign banks are still struggling. This further indicates that the Chinese banking sector is not a fair playing field for foreign banks, as their roles and functions depend on the political intervention and control of the Chinese government. Both foreign banks emphasise practices that support sustainability objectives, especially risk management and mitigation strategies. This gives Chinese domestic banks a learning opportunity, as these areas are what earlier research has considered as important areas of improvement for Chinese banks, (Claessens, Demirguc-Kunt and Huizinga, 2001; Xu, 2011). By analogy to the grassland ecosystem of *Wolf Totem*, foreign banks, as "goats", are expected to improve state-owned banks' overall 'fitness'. Based on the state-owned banks' and foreign banks' sustainability reports, it can be suggested that to some extent, the "goats" have fulfilled the particular role they are given.

This chapter has presented the results from the analysis of the four different types of banks in the Chinese banking sector. The findings indicate that the metaphorical concepts constructed using *Wolf Totem* showed some relevance to the banks activities and behaviours as depicted in their sustainability reports. In the following chapter, this research will discuss how these *Wolf Totem* themed metaphors can be further deployed to gain understandings of the sustainability environment of the Chinese banking sector and how an ecosystems thinking perspective can enrich the understanding of banks' sustainability reports.

Chapter Eight: Ecosystems Analysis and Further Application of Metaphor

> The tragedy of China's May 12 earthquake and its aftershocks may have altered both the way the Chinese view the Beijing Olympics and the way foreigners perceive China. Compared to the Myanmar government's response to the typhoon in Myanmar, or the US government's response to some natural disasters in the United States, the PRC government's response was swift, transparent, and, to an unprecedented extent, driven by public concern for the victims of the quake. Though the games may still evolve into China's coming-out party, they will be tinged with sadness because of the devastation wrought by the earthquake. At the same time, the earthquake has created a strong feeling of community, particularly among average Chinese who sympathize with the quake victims. The sense of unity and emotion will likely infuse the Beijing Olympics and create a strong sense of national pride and determination to succeed.
>
> - Sands(2008, p.1).

In Chapter Seven, this research demonstrated how metaphorical interpretations can be used to make sense of different types of Chinese banks' sustainability reporting. Moving on from the metaphorical transfer from different types of banks to their animal metaphors, this chapter illustrates how the "Wolf Totem" metaphor and its multi-layered meaning can be applied further to comprehend the Chinese banking sector holistically from an ecosystem perspective.

Four areas of discussions are provided in this chapter. First, an "ecosystem" analysis investigates how the sample banks responded to external environmental change triggered by a series of mega-events occurring in 2008, and how their responses can be interpreted using the imposed metaphors. Second, a conceptual mapping of the Chinese banking sector is constructed using metaphors to further reinforce understanding of the relationship between different players in the Chinese banking sector and complement existing Chinese banking literature from an ecosystem perspective. Third, the meaning of "Wolf Totem" as a metaphorical representation for the concept of ecosystem sustainability is again elaborated. By demonstrating how sustainability reporting is viewed from the Chinese banking sector's perspective, this research elaborates the need to embrace ecosystem thinking when evaluating sustainability reporting practices. Lastly, this research comments on the evolving nature of the animal metaphors, explaining how the application of these ecology-grounded metaphors can reflect the reform and development of the Chinese banking sector.

8.1 Mega-events and Their Impact on Chinese Banks' Sustainability Reporting

In 2008, multiple mega-events caused profound impact in China. To further apply the metaphorical narrative process, this research uses a case study of these mega-events to investigate how the banks responded to them by analysing related content in their sustainability reports in 2008. Moreover, the banks' metaphorical concepts are applied to comprehend the behaviour they displayed in response to these mega-events as a further application of the *Wolf Totem* themed metaphorical concepts.

8.1.1 Overview of the Three Mega-events in 2008

In this research, a "mega-event" is defined as a broad set of high-profile events that significantly affect the livelihood of citizens in a country. In the literature, the term often refers to short-term events of fixed duration, causing a high impact, andthat are capable of generating consequences for tourism, urban infrastructural improvements or other intangible benefits related to citizen livelihood (see: Jones, 2001; Horne and Manzenreiter, 2004; Gursoy and Kendall, 2006; Hiller, 1998; Gaffney, 2010). This research also includes, in the definition of mega-events, large-scale natural disasters and significant changes in economic conditions, as these situations also profoundly affect citizen livelihood and business organisations (Tilcsik and Marquis, 2013). Even though natural disasters and economic turbulence trigger declining conditions, in contrast to the improvement created by sports or carnival-type mega-events, positive outcomes may also be accomplished in the form of pride and patriotism displayed in the time of hardship (Mellman, 2005).

Previous studies in relation to mega-events have demonstrated multiple research interests. Some have focused on the challenges and opportunities in tourism management (Gursoy and Kendall 2006; Fourie and Santana-Gallego 2011); others have focused on the consequences for regional politics agenda-setting and infrastructure development (Pillay and Bass, 2008; Burbank and Andranovich, 2012). In addition, discussions regarding strategies that incorporate sustainability ideas into event management to achieve a sustainable mega-event have also gained momentum (see: Andranovich, Burbank and Heying, 2002; Dolles and Soderman, 2010; Hall, 2012). Stakeholders of mega-events have started to recognise that once properly managed, the social and economic benefits of mega-events can transcend their immediate impacts (O'Brien and Chalip, 2008). However, relatively little research exists that investigates the influence of mega-events on the sustainability disclosure practices of businesses not directly involved in the event-management process. Therefore, this research aims to contribute to current understanding in this area by examining the inclusion of mega-events in the sustainability reporting practices adopted by the Chinese banking sector in the wake of a series of such in 2008.

2008 was a significant calendar year for many Chinese firms because of the opportunities and threats brought forth by mega-events that including the Global Financial Crisis (GFC), the Beijing Summer Olympic Games, and the Sichuan Earthquake. These events profoundly affected Chinese banks' operating and sustainability management practices.

The GFC had a significant effect on the world's economies, China's included. As the result of the sub-prime mortgage crisis, the world's financial institutions were affected by takeovers, mergers, nationalisation, or liquidation (Hall, 2008; Mianand Sufi, 2009; Ivashina and Scharfstein, 2010; Cetorelli and Goldberg, 2011). This significantly changed the competitive environment for some countries' banking sectors, as banks of all sizes were forced to close (Mathiason, 2008). The Chinese banking sector, though much less affected by the subprime mortgage crisis, still suffered some side-effects of the GFC, including inflation, currency appreciation, and investment failures (Wang, 2010; Overholt, 2010; Fidmuc and Korhonen, 2010). In addition to the operational risks, the GFC also affected other sustainability-related bank performances. For example, studies investigating effects of the GFC on the banking sector suggest that the financial stability of banks is critical to people's livelihood, as the provision of public finance depends on banks' budgetary revenues (Grewal and Brumby, 2009; Sorokina, Gorden and Matveev, 2009). Thus, the ways banks remained economically viable during the GFC is an essential element for their sustainability development strategies (Gao, 2009). Moreover, businesses' philanthropic endeavours are considered important components of corporate social responsibility (Edmonson and Carroll, 1999). Firms' financial spending on charitable causes is also largely constrained by economic conditions (Godfrey, 2005). The financial distress caused by the GFC could also affect banks' sustainability performances in terms of charitable spending.

On 12 May 2008, an earthquake of magnitude 7.8 struck south-western China, with the epicentre in the Wenchuan County of Sichuan Province (der Hilst, 2008). The earthquake and subsequent tremors had serious consequences for more than 34 million Chinese residents, with impacts including severe damage to the agricultural industry, damage to water and sanitation facilities, and the destruction of numerous homes (World Bank, 2008; Chen, 2009). Chinese banks needed to act quickly, to provide disaster funding relief in addition to donation management and the provision of investment funds for rebuilding. In addition, some Chinese banks' operations were also affected by the loss of branches and an increase in non-performing loans due to businesses destroyed by the earthquake (China Banking Regulatory Commission, 2008).

The Beijing Summer Olympics was the third mega-event affecting China's economy in 2008. The nation pinned significant expectations on the success of the event, hoping it would attract substantial ongoing economic opportunities and, more importantly, counteract negative publicity concerning China's environmental and human-rights positions (Mol, 2010; Mol and Zhang, 2012). Chinese banks played an important role in this mega-event, funding construction of facilities, providing financial services to more than 20,000 athletes and sporting officials, 70,000 working staff, 2,200 registered reporters and 7 million spectators who descended on Beijing (Chinaview, 2008). Moreover, hosting mega-events requires significant financial input, with the provision of sponsorship essential for successful outcomes of the event (Whitson and Horne, 2006). As Brown (2000) suggests, sponsorship towards mega-events can shift from a philanthropic endeavour to a more commercial business decision. Many Chinese firms, including banks, adopted various marketing strategies during the period of the Olympics to influence consumers' attitude towards their brand (Pitt et al, 2010). Among all Chinese banks, the Bank of China was selected by the organisation Games committees as the sole partnership bank of the Olympic

Games (Bank of China, 2008). Guo (2008) considered that the Beijing Olympics would boost the Chinese banking sector's reform process, as the games would be an opportunity for Chinese banks to display their achievements in service innovation and improvement, and enhance brand image.

Mol (2010) suggests that global sports mega-events are an interesting case through which to study global norms such as sustainability, democracy, and transparency due to their high-profile and global nature. Furthermore, as demonstrated through examples such as the 2000 Sydney Olympics, which is considered "the greenest Olympics ever", (Mol, 2010, p.511), sustainability can take centre stage at mega-events in a discursive and material way. In the unique context of China, where Mol and Zhang (2012) consider that "sustainability seems to be far from an accepted norm" (p.126), mega-events such as the 2008 Olympics could become a catalyst for China to strongly improve its environmental and democratic profile. However, both of these studies (Mol, 2010; Mol and Zhang, 2012) focus on the Olympic Games only, and narrowly define sustainability in terms of its environmental dimension.

This research then investigates how these mega-events affect Chinese banks' sustainability management and disclosure by examining mega-events related content in their sustainability reports. By doing so, this study aims to identify whether different types of Chinese banks behave differently in relation to these events and whether these differences correspond to their metaphorical concepts.

8.1.2 China Banking Regulatory Commission's Influence

As seen in Chapter Seven, the China Banking Regulatory Commission influences the sustainability management and reporting of Chinese banks, particularly the state-owned banks. Chinese banks devote considerable effort to disclose sustainability performances to show their compliance to the China Banking Regulatory Commission's guidelines. Therefore, this research also examines the China Banking Regulatory Commission's 2008 annual report to identify whether it provided instructions to influence banks in relation to the three mega-events.

8.1.2.1 Sichuan Earthquake

China Banking Regulatory Commission's 2008 annual report stated that it "immediately launched the earthquake relief effort in banking industry" (China Banking Regulatory Commission, 2008, p.128). The *Urgent Notice of China Banking Regulatory Commission on Calling for Financial Support for Earthquake Relief* was issued by the China Banking Regulatory Commission on 13 May 2008, the day after the disaster. Following the immediate notice, it issued another eleven notices and reports in 2008 to instruct the Chinese banking industry on a number of affected banking issues, including providing financial aid to affected individuals and businesses, funding reconstruction of rural residences, restoring services in the disaster-stricken area, and write-off of bad loans (China Banking Regulatory Commission, 2008, pp.116-121). Through these notices, the China Banking Regulatory Commission raised suggestions to refine post-earthquake operations for banks. China Banking Regulatory Commission (2008, p.98) provides explicit disclosures to show its mandate, for example:

> [T]he CBRC urged banking institutions to provide stronger funding support to the disaster-stricken areas, create a green-light channel for making loans and ensure normal operations of the payment system while effectively controlling risks.

Furthermore, China Banking Regulatory Commission (2008, p.102) highlighted that the joint effort between it and banking institutions to "provide quick and conscientious response to significant events" demonstrated a stronger sense of Chinese banks' social responsibility and "improves banks' behaviour as a responsible corporate citizen". Based on this evidence, the China Banking Regulatory Commission provided specific instructions for banks to follow as the results of the Sichuan Earthquake event, and explicitly required the banks to fulfil these requirements to contribute to overall sustainability.

In addition to providing instructions on banking operations, the China Banking Regulatory Commission also requested banking institutions to make donations; specifically, it "also called on the CBRC headquarters and local offices as well as the banking institutions to make donations to the disaster-stricken areas" (China Banking Regulatory Commission, 2008, p.96). Therefore, the China Banking Regulatory Commission politically influenced banks' charitable-giving functions. To set an example, the China Banking Regulatory Commission itself disclosed that it made RMB 5.16million (USD $710,000) donation (China Banking Regulatory Commission, 2008, p.96). Thus, as the authoritative body of the Chinese banking sector, the China Banking Regulatory Commission put significant emphasis on the Sichuan Earthquake event, and exercised control and intervention in the operation of banking institutions by highlighting necessary actions they needed to take as part of their commitment towards social responsibility and sustainability.

8.1.2.2 Beijing Olympic Games

The Beijing Summer Olympic Games is another event that the China Banking Regulatory Commission emphasised in its 2008 annual report. As it indicated (2008, p.99), Chinese banks began preparing for the Games in 2005, as the success of the Olympics was recognised as a national priority. In 2008 alone, the China Banking Regulatory Commission issued eight notices and guidelines to instruct banks to cooperate and accommodate the need for financial services. In particular, the *Notice of China Banking Regulatory Commission on Calling for Better Services by*

Commercial Banks During the Olympics was issued on the 28March 2008 to specifically assert that state-owned banks (defined by the China Banking Regulatory Commission as large commercial banks) and joint-stock commercial banks needed to take measures to improve business operation, prevent information technology risk, and deliver better services during the Olympics. Furthermore, the China Banking Regulatory Commission (2008) prescribed necessary action plans for commercial banks to follow, including increasing the number of outlets, extending service hours, increasing the number of ATMs and enhancing information security.

The China Banking Regulatory Commission also ensured that its requests were adopted and implemented by banks. On 22 May 2008 it issued the *Notice of China Banking Regulatory Commission on Investigating the Financial Services Provided by Commercial Banks for the Olympics*, indicating that it would closely investigate compliance with its instructions. In July, just one month before the opening of the Beijing Olympics, the Commission's vice chairman himself, Guo Ligen, examined the function of the payment infrastructure specially constructed for the Beijing Olympics (China Banking Regulatory Commission, 2008, p.130). These examples show that CBRC actively exercised its supervisory role to improve the Chinese banking sector, and thus safeguard the success of the Beijing Olympics.

8.1.2.3 The Global Financial Crisis (GFC)

The China Banking Regulatory Commission (2008, p.9) claims that it adopted a proactive and effective regulatory approach in response of the GFC, stating:

> As early as 2006, when signs of overheating in the markets became evident, we activated our counter-cyclical macro-prudential polices to prevent risk contagion across the markets, and strengthened supervision on the use of complex structured instruments. These moves have provided fruitful in ensuring safe and sound operation of the industry and increasing its resilience against economic turbulence.

In addition to acknowledging that the Chinese banking sector performed relatively well, the China Banking Regulatory Commission emphasised that it took strict measures to address the risks caused by the GFC. It also specifically required banks to block cross-market risk contagions, enforcing policies on loans to regulate real-estate financing activities, guiding banks to conduct securitisation on their assets, and assessing the sub-prime crisis and increasing provisions for the losses from non-performing housing loans (China Banking Regulatory Commission, 2008, p.29-30).

In contrast to the Sichuan Earthquake and the Beijing Olympics, for which the China Banking Regulatory Commission provided instruction under the scope of the bank's corporate social responsibility, guidelines on the GFC were provided from the perspectives of the China Banking Regulatory Commission's disclosure of its regulatory initiatives, especially on capital regulation. The China Banking Regulatory Commission (2008, p.73) specially indicated that it further promoted the implementation of the *New Capital Accord*, a framework it issued to regulate Chinese commercial banks' risk management. In addition, the Commission (2008, p.73) stated that it closely monitored the commercial banks' implementation of *New Capital Accord*, all five state-owned banks and two of the joint-stock banks (exact firm not disclosed) were included in the monitoring process. As reported by the China Banking Regulatory Commission (2008, p.73), with its support, the state-owned banks made "significant progress and achieved early outcomes with regard to preparation for the *New Capital Accord* implementation". This indicates that the China Banking Regulatory Commission regarded the implementation of risk-mitigation policies to be an important mechanism for Chinese commercial banks, especially the state-owned banks, to minimise harmful impacts of the GFC and remain sustainable.

In summary, the China Banking Regulatory Commission pointed out the three mega-events as significant issues affecting the Chinese banking sector in 2008. Responses observed in sample banks' sustainability reports will be analysed to identify how these banks reacted to the China Banking Regulatory Commission's influences.

8.1.3 Banks' Sustainability Reporting Response to Mega-events

By searching keywords (including "earthquake", "Olympics", and "Global Financial Crisis"), this research investigated how the three mega-events were addressed in the ten sample banks' sustainability reports. The next sections compare the different banks' disclosed sustainability information in relation to the three mega-events, on characteristics such as whether a separate section was provided for the particular mega-event, the number of sentences used, and whether the China Banking Regulatory Commission's suggestions (as outlined in Section 8.1.2) were addressed in the report.

8.1.3.1 The Sichuan Earthquake

Table 17 provides an overview of how ten sample banks made disclosures regarding the Sichuan Earthquake. Two general characteristics of the banks' sustainability were investigated: whether a separate section was provided for the particular mega-event and the total number of sentences counted in the mega-event specific disclosure. In addition, as outlined in Section 8.1.2.1, the China Banking Regulatory Commission requested the banking institutions in China to rapidly restore interrupted services, increase financial support to the disaster-stricken area, and make donations. This research investigated the banks' Sichuan Earthquake related disclosures to examine whether these requirements were addressed.

Table 17: Bank's Disclosure in Relation to the Sichuan Earthquake

Sichuan Earthquake-Related Disclosures	State-owned Bank				Policy Bank
	BOC	ICBC	ABC	CCB	CDB
Whether a separate section is provided	Yes	Yes	Yes	Yes	Yes
Number of sentences used	44	26	33	37	51
Restoring services	Yes	Yes	Yes	Yes	Yes
Providing funding support	Yes	Yes	Yes	Yes	Yes
Donations (in millions USD)	20.54	19.43	25.19	24.51	4.84
Sichuan Earthquake-Related Disclosures	Joint-Stock Bank			Foreign Bank	
	CMB	SPD	CIB	HSBC	SCB
Whether a separate section is provided	Yes	Yes	No	No	No
Number of sentences used	17	6	1	9	4
Restoring services	Yes	Yes	No	No	No
Provide funding support	Yes	Yes	Yes	No	No
Donations (in millions USD)	3.27	2.80	3.14	0.35	3.00

Based on the results in Table 17, the Sichuan earthquake drew at least some disclosure from every bank studied in this research. Seven out of the eight Chinese domestic banks addressed the China Banking Regulatory Commission’s requirement to restore services and provide financial aid in full, with the exception of the Industrial Bank of China (CIB). All sample banks, including the two foreign-owned banks made disclosure, reporting the amount of donations provided and channelled by the bank to assist disaster relief.

Measured by the number of sentences used, it is clear that the four state-owned banks and the policy bank put much more emphasis on reporting their sustainability performance in relation to the Sichuan Earthquake. This finding indicates that when facing a disastrous event with significant negative impacts on the wellbeing of Chinese society, Chinese state-owned banks and policy banks are likely to take more social responsibility then either the smaller Chinese banks or foreign banks.

The state-owned banks provided explicit narratives outlining what responsibilities they had taken to minimise the negative impacts of the earthquake. For example, the Bank of China (2008, p.21) stated that it "extended credit for the earthquake relief effort in a bid to help business and individuals in the disaster areas rebuild and resume production as soon as possible". Furthermore, by signing the *Comprehensive Strategic Cooperation Agreement* with the Sichuan provincial government, the Bank of China pledged to provide up to RMB 300billion (USD 42.46billion) to "support key enterprises, backbone industries and major infrastructure projects in affected areas". Similarly, the China Construction Bank reported that it had extended credit amounting to RMB 222.92billion (USD 31.55billion) to 270 corporations affected by the earthquake. This shows that the state-owned banks' role in disaster relief and rebuilding was significant.

Similar to the findings in Section 7.3.2, that as a policy bank, the China Development Bank directed its funding towards national projects to share the burden with state-owned banks. The China Development Bank made significant commitment to disaster relief and rebuilding after the earthquake in a very similar way to the state-owned banks. Based on the China Development Bank's (2008) report, it provided RMB 17billion (USD 2.41billion) in financial credit for disaster relief, supporting a number of major infrastructure repair and reconstruction projects, including rebuilding the local hydro-power station and railway system.

Furthermore, due to state-owned banks' large presence in all regions of China, they suffered more direct impact from the earthquake than did other banks. For example, the Bank of China included a special column in its sustainability report to pay tribute to an employee's sacrifice of his own life to save a customer in the earthquake disaster.

> One of the most memorable examples was that of Zhang Yu, a customer relationship officer at the Dujiangyan sub-branch, who fended off a falling crossbeam to save the lives of those around him, but tragically sacrificed his own life in doing so (Bank of China, 2008, p.14).

The Agricultural Bank of China was also significantly affected by the disaster: the bank made disclosures that five branches suffered damages and more than 160 employees suffered death or injuries, or were missing (Agricultural Bank of China, 2008, p.100).The direct impact suffered is another possible reason that the large state-owned banks made more disclosures in relation to the Sichuan Earthquake. This finding is consistent with Muller and Whiteman's (2009) conclusion that a firm has more incentive for philanthropic disaster commitment if it has a local presence in the disaster area. In comparison, the three joint-stock banks and both of the foreign banks in this research (HSBC and Standard Chartered Bank) focus their operations on the eastern side of China, and they made fewer earthquake-related disclosures than the state-owned banks. Furthermore, the results showed that the Industrial Bank of China (CIB) made minimal commitments, providing a mere one-sentence disclosure in its 2008 sustainability report stating that it had provided more loans to the Sichuan region and made donations. Considering that this was the bank's first ever sustainability report (Industrial Bank of China, 2008), and the report was less detailed (being only 17 pages long, much shorter compared to the other nine banks studied, as shown in Table 8), it can be argued that the Industrial Bank of China's 2008 sustainability report suffers due to the bank's lack of experience in producing sustainability reports.

This research holds that the donation amount was a crucial feature of the disclosures relating to the disaster. Transparency and immediate communication resulting from social-media networks and mobile devices led to swift action from stakeholder groups. Several different versions[24] of ranked list of donations went "viral" and contributed to a positive social assessment of banks that made large donations (relative to profit), with companies making relatively lower donations boycotted by stakeholders (Sohu News, 2008; Liu, Jia, and Li, 2011).

To provide a more detailed evaluation on the donation amount reported in the banks' 2008 sustainability reports, Table 18 ranks the donations and outline the proportion of donations made by each bank compared to the total donations made by the Chinese banking sector, based on the China Banking Regulatory Commission's (2008, p.96) reported figure that the Chinese banking sector as a whole donated 900million RMB (123.21million USD).

Table 18: Banks' Donation Amount and Weight in the Sector Total

Bank	Donation (m RMB)	Donation (m USD)	% in Sector
Agricultural Bank of China (ABC)	184.00	25.19	20.44%
China Construction Bank (CCB)	179.00	24.51	19.89%
Bank of China (BOC)	150.00	20.54	16.67%
Industrial and Commercial Bank of China (ICBC)	141.91	19.43	15.77%
China Development Bank (CDB)	35.32	4.84	3.92%
China Merchant Bank (CMB)	23.85	3.27	2.65%
Industrial Bank of China (CIB)	22.94	3.14	2.55%
Standard Chartered Bank China (SCBC)	21.91	3.00	2.43%
Shanghai Pudong Development Bank (SPD)	20.43	2.80	2.27%
HSBC China (HSBCC)	2.57	0.35	0.29%

[24] As example, two of China's leading social media platforms, Sina (http://finance.sina.com.cn/blank/zzqyxd.shtml)andSohu(http://news.sohu.com/20080603/n257252415.shtml) provided different versions of donation rankings, possibly due their being prepared at different times.

Based on the results shown in Table 18, the large state-owned banks contributed significantly more than other types of Chinese banks. When aggregated, the four state-owned banks' total donations reached USD 89.67billion, accounting for approximately 73 percent of total donations made by all institutions in the Chinese banking sectors. This result supports Zhang, Rezaee and Zhu's (2009) finding that a business's financial contributions towards philanthropic disaster response are positively correlated with firm size, profit and available resources. Also, as Crampton and Patten (2008) suggested, economic resources are, above all else, the main constraint to a firm's philanthropic financial contribution. In contrast to suggestions made by Zhang, Rezaee and Zhu (2009) that non-state owned firms have more incentive in corporate philanthropy, this research's findings clearly show that Chinese state-owned banks led other banks in terms of philanthropic giving.

In a metaphorical sense, the contributions of state-owned Chinese banks towards the earthquake recovery can be considered parallel to the sacrificial nature of sheep. As explained in Chapter Six, larger sheep are often selected as sacrificial offerings in Chinese culture, and such sacrifice is considered pure and beautiful. This sheep metaphor implies that, due to their large operational scale and asset bases, Chinese state-owned banks are more likely to sacrifice more financially in response to emerging issues such as natural-disaster relief. Also, the application of the sheep metaphor implies that the state-owned banks' displayed behaviour in the earthquake event is not based on self-interest; rather, the shepherd plays the dominating role in guiding the sheep's activities. As a common observation, all state-owned banks clearly indicated that their responses to earthquake were in response to the calls and instructions from the China Banking Regulatory Commission, further demonstrating the similarity between sheep's soft and obedient nature and the way state-owned banks embrace government controls.

The policy bank China Development Bank and two of the three joint-stock banks examined in this research (China Merchant Bank and Shanghai Pudong Development Bank) also made similar disclosures to align their earthquake-related activities with the China Banking Regulatory Commission's instructions. However, their donations were much smaller than those of the state-owned banks. The use of sheep, dog, and gazelle metaphors to describe the state-owned banks, policy banks and joint-stock banks, respectively, suggest that these banks' activities were also influenced by the control mechanisms instituted by the China Banking Regulatory Commission, an agency of the state government of China (as the metaphorical human), but the state-owned banks bore the most responsibility as providers in the banking ecosystem like sheep do in the grasslands.

8.1.3.2 The Beijing Olympic Games

Similar to the analysis conducted for the Sichuan Earthquake, the banks' Olympics-specific disclosures are summarised in Table 19. As outlined in Section 8.1.2, the China Banking Regulatory Commission requested the banking institutions in China to serve the Olympic Games by enhancing their services and operations. The banks' responses are presented.

Based on the results in Table 19, the Beijing Olympic Games attracted a different level of attentions in Chinese banks' sustainability reports. However, an explanation can be provided.

Table 19: Banks' Disclosure in Relation to the Beijing Olympic Games

Olympic Games-Related Disclosures	State-owned Bank				Policy Bank
	BOC	ICBC	ABC	CCB	CDB
Whether a separate section is provided	Yes	No	No	Yes	Yes
Number of sentences used	59	22	11	30	12
Improving business operations	Yes	Yes	Yes	Yes	No
Preventing IT risks	Yes	Yes	Yes	Yes	No
Deliver better services	Yes	Yes	Yes	Yes	No
Increasing number of outlets	Yes	Yes	Yes	Yes	No
Extending services hours	Yes	Yes	Yes	Yes	No
Increasing number of ATMs	Yes	Yes	Yes	Yes	No
Olympic Games-Related Disclosures	Joint-Stock Bank			Foreign Bank	
	CMB	SPD	CIB	HSBC	SCB
Whether a separate section is provided	Yes	Yes	N/A	N/A	N/A
Number of sentences used	33	21	0	0	0
Improving business operations	Yes	Yes	N/A	N/A	N/A
Prevent IT risks	Yes	Yes	N/A	N/A	N/A
Deliver better services	Yes	Yes	N/A	N/A	N/A
Increasing number of outlets	Yes	Yes	N/A	N/A	N/A
Extending services hours	Yes	Yes	N/A	N/A	N/A
Increasing number of ATMs	Yes	Yes	N/A	N/A	N/A

First, as identified in the earthquake disclosure, the Industrial Bank of China (CIB)'s 2008 sustainability report was prepared poorly, most probably due to inexperience. As shown in Table 19, it made no disclosures concerning the Olympic Games despite the China Banking Regulatory Commission's request that Chinese commercial banks consider the event as an opportunity to enhance operations and improve service. The two foreign banks also made no disclosure regarding the Olympic Games in their 2008 sustainability reports. This finding suggests that compared to Chinese domestic banks, they are under less influence from the China Banking Regulatory Commission to comply. Also, despite suggestions that the Olympic Games is a national priority and embodies national pride (Sands, 2008), it could be less appealing, and even irrelevant, to foreign firms.

Excluding the Industrial Bank of China, all other Chinese commercial banks (the four state-owned banks and two joint-stock banks) addressed the China Banking Regulatory Commission's request in their sustainability reports. These banks stated that they considered the Olympic Games to be a unique opportunity to improve service quality and enhance facilities. Although their disclosures varied in length, they all reported how they had aimed for improvement to provide service to international customers, and to reap the perceived benefits resulting from the enhanced service quality. In contrast, China Development Bank, as a policy bank, did not participate in personal banking, and hence it had no need to meet the China Banking Regulatory Commission's requests to provide better services to the Olympic Games athletes, spectators and tourists. However, the China Development Bank fulfilled other Olympics-related commitments, most notably funding Olympic venue construction, including providing RMB 930million funding (USD 132.35million) for constructing the Bird's Nest stadium and RMB280million (USD 36.59million) for building the National Gymnasium and the Olympic Village. Thus, this research's findings suggest that in addition to acting as the main financial provider for national infrastructure development projects, the China Development Bank also took on the burden to provide funding in service of the Olympic Games.

As the sole bank sponsor, the Bank of China could be expected to emphasise its commitment to the events to enhance its brand image and reputation (Brown, 2000; Pitt et al., 2010). As shown in Table 19, the Bank of China made the most extensive disclosure among all banks, consistent with its role as one of the main sponsors of the event. A study of its report shows that in addition to addressing the China Banking Regulatory Commission's requested areas for improvements, the Bank of China reported many other activities, including providing on-site services at Olympics Games venues, facilitating ticket sales and transactions, and recruiting more than 4,000 employees with foreign language skills to better serve overseas customers. Thus, although sponsorship of sports events is generally regarded as a marketing strategy or commercial decision (Brown, 2000; Pitt et al., 2010), the Bank of China's disclosure of its Olympics Games-related activities in its sustainability report reveals that broad sustainability objectives can also be achieved, including creating jobs and enriching social life.

Another interesting finding is that two of the joint-stock banks examined (China Merchant Bank and Shanghai Pudong Development Bank) made more Olympics-specific disclosures than the three non-sponsor state-owned banks, the opposite case to the findings related to the Sichuan Earthquake. Both of the joint-stock banks provided a designated section highlighting how the China Banking Regulatory Commission requested objectives were met and provided cases to more comprehensively illustrate their activities. The China Merchant Bank provided disclosures outlining that the selection of volunteers and improvement of services were the two major achievements related to its commitment towards the Olympics (2008, p.31). Shanghai Pudong Development Bank provided a case study that highlighted its service improvements and zero-complaint achievement during the Games (2008, pp.19-20). Notably, the Chairman's Letter stated that Shanghai Pudong Development Bank would use the successful experience in providing services for the Olympic Games to prepare for the 2010 Shanghai World Expo

(Shanghai Pudong Development Bank, 2008, p.5). Thus, both joint-stock banks have used the disclosure of Olympic Games-related activity to emphasise their improved service quality.

If the earthquake can be considered a negative ecosystem change for Chinese banks (due to loss of branches, burdens of financial sacrifices, and operation difficulties), the Olympic Games can be considered as a favourable opportunity, especially appealing for the state-owned banks and joint-stock banks. A similar scenario in *Wolf Totem* is the wet season in the grasslands. Both sheep and gazelles benefit from the ample supply of grass during the wet season, and these two animals use this condition to their advantage, rapidly reproducing and gaining weight. This is similar to the way state-owned banks and joint-stock banks reported their improved service quality, which potentially bring financial growth. Extra efforts were observed in the disclosure of the China Merchant Bank and Shanghai Pudong Development Bank, indicating their commitment to improving their service quality. Furthermore, Shanghai Pudong Development Bank's disclosure shows the bank's proactive manner in considering the implication of the Olympic Games for future mega-events such as the World Expo; this resembles the gazelles' flexibility and agility. The dog metaphor this research uses for policy banks also implies that the policy bank will not benefit much from the growth of the commercial banking market (grassland), just as the China Development Bank's disclosure of its Olympic Games-related activity reveals that the bank only expresses commitment to the event itself, rather than considering it as an opportunity to improve services and gain benefits.

8.1.3.3 The Global Financial Crisis

Lastly, Table 20 summarises the disclosures made by banks concerning the Global Financial Crisis (GFC), showing how banks responded to the China Banking

Regulatory Commission's request to strengthen risk-mitigation mechanism, assess real-estate market risks, and inject funds into the market to stimulate the economy.

Table 20: Banks' Disclosures in Relation to the GFC

GFC-Related Disclosures	State-owned Bank				Policy Bank
	BOC	ICBC	ABC	CCB	CDB
Whether a separate section is provided	Yes	Yes	No	No	Yes
Number of sentences used	35	18	15	22	29
Improving risk mitigation	Yes	Yes	Yes	Yes	Yes
Accessing real-estate market risks	Yes	Yes	Yes	Yes	No
Stimulating economic development	Yes	Yes	Yes	Yes	Yes
GFC-Related Disclosures	Joint-Stock Bank			Foreign Bank	
	CMB	SPD	CIB	HSBC	SCB
Whether a separate section is provided	Yes	No	No	N/A	No
Number of sentences used	11	7	3	0	13
Improving risk mitigation	Yes	Yes	Yes	N/A	Yes
Accessing real-estate market risks	No	No	No	N/A	No
Stimulating economic development	Yes	Yes	No	N/A	No

The results in Table 20 show that all four state-owned banks and the policy bank studied in this research have all provided much more information in their sustainability reports as a response to the GFC, than did the joint-stock banks and foreign banks. All of these five banks (Bank of China, Industrial and Commercial Bank of China, Agricultural Bank of China, China Construction Bank and China Development Bank) highlighted national policy as the dominating driver for these banks' commitment to GFC-related issues. Also, the five banks reported how these policies were implemented in separate sections concerning various important Chinese national policies, such as providing support to small-to-medium enterprises (SMEs), building infrastructure, and extending loans to businesses. For example, the

Bank of China (2008, p.28) addressed the China Banking Regulatory Commission's requirements by stating:

> As the international financial crisis and economic slowdown in China took hold, BOC responded rapidly with the immediate implementation of the central government's macroeconomic policy. By increasing effective credit, supporting the expansion of domestic demand, adjusting its credit structure and enhancing its financial services, the Bank made a concerted effort to uncover opportunities and spread its risk, further enhanced its ability to make growth and achieved sound and rapid development.

The joint-stock banks provided fewer and less-extensive disclosures, and did not address all concerns raised by the China Banking Regulatory Commission. However, their narrative disclosures represent their endeavours to implement risk mitigation in their operation management, and to support the national economic-stimulation plan. Unlike the state-owned banks, the joint-stock banks' engagement in the stimulation plan focused on supporting SMEs, rather than large state projects or enterprises. An example can be seen in the China Merchant Bank's disclosure, that improving service towards SME customers was the most important corporate strategy to mitigate the impacts of the GFC; the bank emphasised that it would continue to support the development of SMEs with the president's quote of "saving the bank by saving enterprises" (China Merchant Bank, 2008, p.24). Thus, similar to the findings concerning earthquake-related disclosures, the state-owned banks were charged with bigger responsibilities, while the joint-stock banks were directed towards smaller and more flexible objectives.

Thus, in the scenario of the GFC which had significant negative impacts on the banking sector, the majority of Chinese domestic banks acted in a similar way, which was influenced and controlled by the state government of China. This finding is similar to how state-owned banks, policy bank and joint-stock banks responded to the earthquake disaster, where the behaviour of sheep, dogs and gazelles were subject to human control to cope with negative environmental change. This further demonstrates that when facing challenging events, the Chinese state government will strengthen its control on Chinese domestic banks, similar to the way Mongolians nomads protecting the grassland animals during natural hazards, as narrated in *Wolf Totem*.

Another notable finding is that the Standard Chartered Bank made a considerable number of disclosures regarding the GFC, while not addressing the other two mega-events. In its 2008 sustainability report, the bank not only disclosed its commitment, strategy, and objectives to minimise the negative impacts of the GFC on a global level, but also clearly indicated that as a global leader in the banking sector, it would cooperate with banks in other countries to help them to improve risk-mitigation policies and procedures to better cope with GFC (Standard Chartered Bank, 2008, p.23). Thus, as a foreign bank, the Standard Chartered Bank's response to GFC portrays a vigilant and brave image, facing danger with confidence and courage. This has similarities with the goat metaphor this research imposed for foreign banks: as discussed in Chapter Six, the Mongolian nomads consider goat is as smart and brave, and incorporate goats in their sheep herds to protect sheep from danger. This is very similar to how the Standard Chartered Bank endeavoured to help other banks by transferring its expertise during and after GFC.

Studies on Chinese banks and state-owned firms suggest that a certain degree of state intervention in crisis is necessary. For example, PricewaterhouseCoopers's(2015) report on global state-owned enterprises suggested:

> State ownership has also been used as a crisis response tool in instances where events threaten the survival of companies deemed “too big” or “too strategic” to fail. Government ownership may also serve as one of the policy levels government can use, not only to maintain jobs, but also sustain a network of firms that serves as suppliers to trouble companies which are under current stress but are still seen to have a strategic value in the long term (p.18).

Similarly, Sun (2009) finds that in contrast to the Western banks, Chinese banks’ provision of public finance and SMEs finance did not decline during the GFC period; in fact, some growth was observed. When Western banks were forced to deleverage, Chinese banks were capable of gearing up and injecting funds into the economy and providing aid to enterprises in distress. Hence, this research argues that despite claims that privatisation could be a means to enhance business entities’ efficiency (Boycko, Shleifer and Vishny, 1996; Hunt and Lynk, 1995; Zhang, Parker and Kirkpatrick, 2005; O’Toole, Morgenroth and Ha, 2015), in the unique context of the Chinese economy, a certain degree of state control and intervention is also necessary for overall stability and growth. As *Wolf Totem* tells, human management is an inseparable component of ecosystem balance, but care must be taken as improper management can cause negative consequences.

8.1.4 Sustainability Reporting as Ecological Strategies

Chapter Three outlined that one of the purposes of embracing ecosystem thinking in this research is to enable the examination of sustainability reporting practices from an ecosystems perspective. Based on the results and discussions related to how banks in China disclosed their sustainability performances in response to mega-events, this research argues that the banks’ sustainability reporting practices can be considered as ecological strategies that each species in an ecosystem uses to shape its conditions to survival.

As outlined in Chapter Three, the central concept of ecological strategies is that each ecosystem species needs to be responsive to local conditions and adaptive to changing conditions (Westoby et al., 2002; Büchi and Vuilleumier, 2016). The manner in which banking institutions in China conducted their activities and reported the related performance in response to the mega-events can be considered as indicative of how the banks, as ecosystem species, applied ecological strategies in pursing sustainability.

However, not all species are equally able to meet these two strategic objectives. Certain species (such as dinosaurs) perish due to their inability to cope with extreme changes in conditions. The application of animal metaphors in this research implies that different types of banks in the Chinese banking sector could also have different capabilities for dealing with changing conditions, and the China Banking Regulatory Commission's intervention could be considered as necessary mechanisms to help these banks (especially the large and relatively weak state-owned banks) to better cope.

8.2 Metaphorical Mapping of the Chinese Banking Sector

The analysis presented in the previous section demonstrated the application of metaphors to embrace ecosystem thinking in comprehending the sample banks' sustainability reporting in response to mega-events. Similar to zoomorphic approaches where animal metaphors are used to describe human personalities (for example, see: Gosling, 2001; Goatly, 2006; Sommer and Sommer 2011), this research used "Wolf Totem" themed animal metaphors to describe some relevant characteristics of different types of Chinese banks. The purpose of using these metaphors is to enable to readers to objectify certain qualities and traits (Young, 2013), and hence to gain a better understanding of the uniqueness of different types of banks in the Chinese banking sector. Palmer and Dunford (1996, p.697) claim that "metaphors direct attentions to certain interpretations of situations and away from others", but more importantly, as Oswick, Putnam, and Keenoy (2004) state, more important than providing a matching metaphor is to consider the creativity associated with the abstraction caused by using the metaphor.

As noted, Leung and Copper (2008) used the story of *Alice in Wonderland* as a contextual background to comprehend the relationship between corporate CEOs, regulators and auditors in the modern business world. Similarly, by using "Wolf Totem" themed animal metaphors, this research portrays the Chinese banking sector as a "grassland ecosystem" in which each species and their relationships are important for the harmony and stability of the holistic ecosystem, as illustrated in Figure 6.

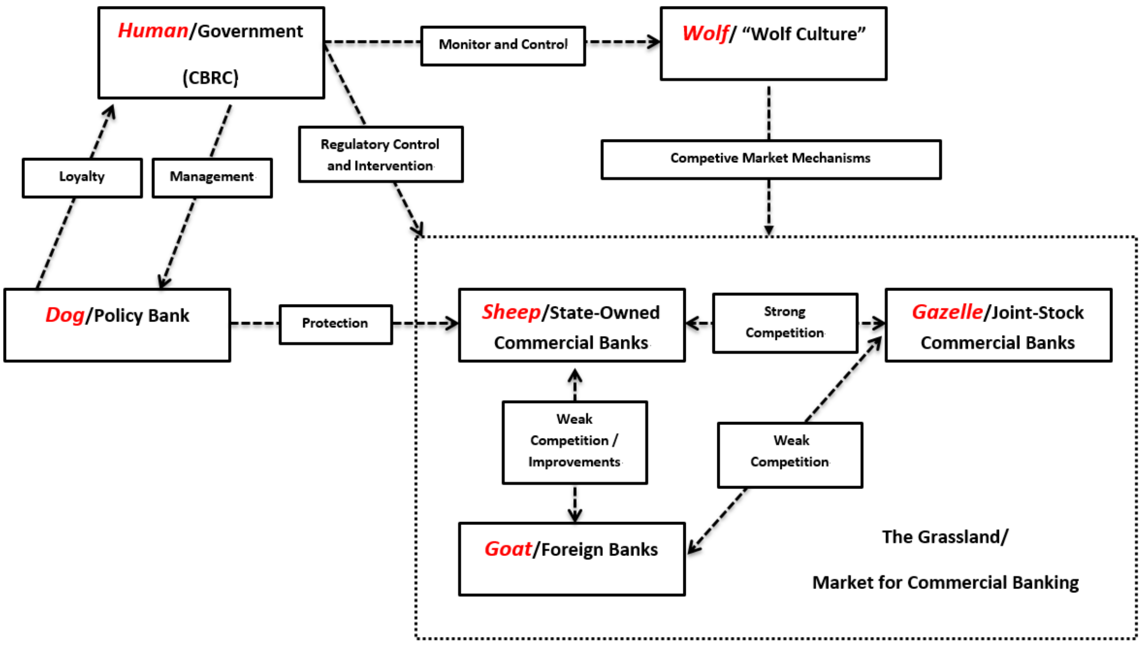

Figure 6： Metaphorical Mapping of the Chinese Banking Sector

Figure 6 shows a number of important features of the Chinese banking sector that can be comprehended using the metaphorical concepts, and tested by examining the content in the banks' sustainability reports. The longitudinal study this research applied also provides some insights on whether certain features of Chinese banks can be expanded to incorporate recent changes and developments as observed in their sustainability reports.

The first key feature this research emphasises is the important role the Chinese government plays in shaping the ecosystem environment and overall wellbeing of the entire Chinese banking sector. The application of metaphors enables this study to compare the role of the Chinese government in the Chinese banking sector with the humans (first the Mongolian nomads and the later Han immigrants) in the story of *Wolf Totem*. As the novel relates, inappropriate management exercised by humans on the environment often causes negative feedback to the natural ecosystem, which leads in turn to an unsustainable state and even disastrous crisis. Thus, the appropriateness of the Chinese government's banking regulation will be essential to the future of the Chinese banking sector. Although Commoner (1971) suggests that nature knows best and humans should not intervene in natural processes, the story of *Wolf Totem* suggest that human impact on the ecosystem is inevitable, and to some extent active human control is needed to preserve the balance of the ecosystem.

The content disclosed in the Chinese banks' sustainability reports indicate that the Chinese government directed Chinese banks' operational focus by providing state policies concerning different priorities. Based on the findings, Chinese state-owned banks, policy banks, and joint-stock banks have all implemented state policies as an important component of their sustainability management, and have actively disclosed related performance indicators in their sustainability reports. It was also found that the Chinese government exercised its power of control over the Chinese banks during mega-events through its agency, the China Banking Regulatory Commission, mandating them to conduct certain activities and meet designated objectives as means to be more socially responsible. These observations show that the Chinese domestic banks' sustainability performances and reporting practices are largely influenced by the Chinese government's national policies and the China Banking Regulatory Commission's guidelines, which calls for different considerations to the Western-oriented concept of voluntary sustainability reporting.

The importance of government control, as shown in the context of the Chinese banking sector also provides a counter-argument against the neoliberal market-dominated perspective of social responsibility: that free-market competition and profit-seeking motives will lead to economic development. The dominant neoliberal economic order has been criticised for causing devastating and on-going economic crisis (Birch and Mykhnenko, 2010; Peet, 2011) and intensifying social concerns about sustainability (Faber and McCarthy, 2003; Crouch, 2012). Just as the Mongolian nomads did not allow all grassland animals to freely compete with each other for resources, the competitive environment in the Chinese banking sector is also restricted and, monitored through frequent interventions by the Chinese government. KPMG (2015) reports that regulatory requirements enacted by the Chinese government on the banking sector continue to become more strict, but as a result, Chinese banks have been able to maintain steady liquidity, control credit risks, and gain increased profits. This indicates that to a certain extent, government control can lead to favourable conditions that are important to the future of the Chinese banking sector. As He (2012) suggested, banking regulation in China has established the Chinese banking institutional structure to be responsive to government policy. This research complements He's (2012) findings by indicating that this responsiveness is also a key element of the sustainability management and reporting practice of Chinese banks.

Another key feature illustrated by the metaphorical mapping, as part of the government's intervention in the Chinese banking sector as an ecosystem, is the unique dog-like policy bank and its protection of state-owned banks. The results clearly show that the China Development Bank (CDB) explicitly discloses how it has fulfilled its protective role by continuously injecting financial support to Chinese pillar industries (which are dominated by Chinese state-owned enterprises) and reduces the non-performing burden of state-owned banks. As also shown in the sustainability reports, Chinese state-owned banks were able to progressively reduce their non-performing loan ratios and achieve growing profitability and returns. The findings of this research highlight that the establishment of Chinese policy banks and the way they operate protects the Chinese state-owned banks; this provide further supports earlier arguments that the policy banks are essential to the stability and development of the Chinese banking sector and, indeed, the entire Chinese economy (see: Sanderson and Forsythe, 2012; Haley and Haley, 2013). In the perspective of the metaphorical story, policy banks as "dogs" have provided ongoing protection for the valuable "sheep" (state-owned banks), which are the most important assets of grassland residents. Just as the Mongolian nomad's grassland lifestyle depends on the wellbeing of sheep, the Chinese state-owned banks are also crucial to the Chinese economy. Therefore, to better preserve the stability of the Chinese banking sector and achieve growth, it is important for the policy banks to perform their duties and at the same time remain fit themselves.

Lastly, the metaphorical mapping also reveals the intertwined relationship between different players in the competitive field of the Chinese banking sector, and how government control and market mechanisms affect them collectively. As shown in Figure 6, the state-owned banks ("sheep") and joint-stock banks ("gazelle") are the main competitors in the field of commercial banking. The foreign banks ("goats") still only constitute weak competition due to limited access and resources, but their presence helps to improve the wellbeing of state-owned banks ("sheep"). Also, state intervention ("humans") and market competition ("wolf") are two important influences shaping the overall market environment of the Chinese banking sector. This research holds that for the unique context of the Chinese banking sector, a balance needs to be achieved between state control and competition to facilitate optimal conditions for the development of the Chinese banking sector. Despite concerns that state ownership and intervention in competition cause low firm productivity and efficiency (Zhang, Zhang and Zhao, 2001; Xu, Zhu and Lin, 2005; Lin, Ma and Su, 2009), the interpretation provided here suggests that state ownership and controls are not entirely harmful, but rather, can be a positive influence on stability and growth. Based on the results of this research and other studies (see: Zhang, Wang and Wang, 2014; Tan and Floros, 2013; KPMG, 2015), it can be seen that the Chinese banks are achieving an effective balance, progressively reducing state ownership, accelerating commercialisation and privatisation, and increasingly engaging in domestic and global competitions. The future state of the Chinese banking sector and its sustainability management and reporting will be an interesting area for upcoming research to identify whether a harmonious outcome can be achieved.

Although the metaphorical conceptual mapping appears as a standalone ecosystem, this research emphasises that the Chinese banking sector is linked with many other business systems, and is just a small part of a holistic global economy. The *Wolf Totem* shows that the Inner Mongolian grassland ecosystem is influential to, and is influenced by, many other things external to the grasslands. For example, the demand for meat supply from other regions of China puts political pressure on the Mongolian region to increase the number of sheep. Industrial and agricultural development originating outside the Inner Mongolian grasslands have fundamentally changed the natural environment there, and as a result, humans and animals have to adopt to different ways of living. Moreover, the degraded grassland becomes a contributing factor to environmental crisis in other areas of China. This story suggests that the overall sustainability of the Chinese banking sector will also connect to other aspects of the Chinese domestic and global environments, causing effects or being affected. The investigation of mega-events demonstrates that as an ecosystem within other ecosystems, the Chinese banking sector's sustainability reporting reflects how the sector interacts with the changing external environment and fulfils certain roles under the influences of the China Banking Regulatory Commission.

8.3 Incorporating Ecosystem Thinking in Measuring and Reporting Sustainability

As outlined in Chapter Five, because people use metaphors based on their own biased perceptions (conscious or subconscious), metaphors carry values (Ricoure, 1979; Young, 2013). As Lakoff and Johnson (1980) suggests, users of conceptual of metaphors may attempt to influence political activism through their selection of metaphor(s). This demonstrates the inseparable relationships between use of language, power and politics and the social construction of metaphor. The application of metaphor in this research also calls for consideration of complex social and political value embedded in metaphors for sustainability.

In addition, to show the similarity between the primary concept and the metaphorical concept, the even more important function of a metaphor is to elaborate the dissimilarity (Ricoure, 1979). The “Wolf Totem” metaphor serves the function of both familiarising and defamiliarising the concept of sustainability. The application of this multi-tiered metaphor in this research aims to incorporate and “revitalise” the value of ecosystem thinking in conceptualising and evaluating sustainability, as current thought regarding the sustainable development concept tends to emphasise human needs, and could potentially overlook the environmental and social concerns due to its anthropocentric nature (Lele, 1991; Hopwood, Mellor and O’Brien, 2005; Sanchez, 2008; Martinez-Alier et al., 2010). In contrast, ecosystem thinking puts more emphasis on the balance between humans and other species, promoting an ethical and aesthetic valuing of nature (Code, 2006; Mueller, 2009; Wang, 2010), and a holistic systems view to understand the relationship and the wholeness of the ecosystem. The author of *Wolf Totem* writes the story to criticise the short-sightedness of ruling human classes when managing the grasslands in a way opposing traditional Mongolian cultural values and norms, and pointing out the connection between this short-sightedness and subsequent environmental crisis. This research has used a metaphorical narrative to indicate that if ecosystem balance is overlooked and authoritative management is driven by merely short-term gains, the

Chinese banking sector could suffer from imbalance to detriment of the overall wellbeing of the Chinese economy and society.

As in the earlier chapters, a number of metaphors for sustainability are evaluated based on their conceptual assumptions about the appropriateness of anthropocentrism (economic-centric vs. ecology-centric), the state of sustainability (whether it is fixed and controllable, or dynamic and ever-changing) and the proposed strategic approaches (plan for sustainability management or global issues driving emerging strategies for sustainability). The results show that different metaphors will impose a bias towards certain perspectives or values. The construction of the “Wolf Totem” metaphor in this research aims to promote an idea that these opposing assumptions are not mutually exclusive. Rather, similar to earlier discussions on the balance of competition and government control, a balancing point can be sought. The abstract idea of the “Wolf Totem” metaphor is that of respecting nature while recognising the importance of humans’ role as monitor and preserver of nature, stabilising the system to achieve growth and development, and considering strategic planning, responsiveness, and proactivity in a rapid changing global environment as important factors in sustainability management. Thus, rather than leaning towards “sustainable” or “development”, the “Wolf Totem” metaphor emphasises the idea of harmony, which Fleckenstein et al. (2008, p.391) define as the “combination or adaptation of parts, elements, or related things, so as to form a consistent and orderly whole; agreement, accord, congruity”. As *Wolf Totem* portrays, the harmonious relationship between humans, animals and the natural environment was the main reason for the enduring healthy grassland ecosystem before the harmful introduction of invasive agricultural and industrial development. Hence, the “Wolf Totem” metaphor aims to elaborate that harmony, while frequently overlooked, can be an essential concept for the meaning of sustainability. This is in contrast to the current concept of sustainable development, which is largely biased towards the “development” perspective and thus causes imbalance between economic development and social and environmental concerns (Sanchez, 2008; Martinez-Alier et al., 2010).

8.4 The Evolving Nature of Animal Metaphor

This research has provided an illustrative metaphor to comprehend their characteristics of the Chinese banking sector and map a holistic ecosystem. This application of metaphor further demonstrates the linguistic and conceptual power of metaphor in conveying meanings and making sense of complex social phenomena.

Animals adapt to natural environment changes (Schmidt-Nielsen, 1997).*Wolf Totem* also gives numerous examples of different grassland animals changing their behaviour to better survive the environment, which is constantly undergoing natural or human impacts. Based on the results presented in Chapter Seven, Chinese banks also have undergone changes, and displayed new attributes and courses of action.

One of the notable findings is that the state-owned banks, often perceived as weak, have grown stronger, achieving higher efficiency and profitability as shown in their continuously growing profit margins, returns on assets and returns on equity. This indicates that under the influences of both government control (“human”) and market competition (“wolf”), the wellbeing of state-owned banks (“sheep”) improves. In addition to the aforementioned important protective mechanism provided by the Chinese government (“human”) and policy bank (“dog”), the commercialisation process has also contributed to the improvement of the Chinese state-owned banks.

Recent studies suggest that progressive privatisation, in the form of private ownership, especially foreign ownership, in the Chinese state-owned banks is a significant contributing factor for their improved performance (Hasan and Xie, 2013; Jiang, Yao and Feng, 2013; Lee and Hsieh, 2014; Greenaway, Guariglia and Yu, 2014; Xu, Gan and Hu, 2015). At present, a number of foreign banks have invested in Chinese state-owned banks by acquiring equities (Ernest and Young, 2014; PricewaterhouseCoopers, 2014; KPMG 2015). Although foreign investors are only permitted to be minority shareholders, their involvement positively influences the Chinese state-owned banks' corporate governance and leads to technological innovation, financial stability, revenue inflow, and efficiency gains in both the short and long runs (Jiang, Yao and Feng, 2013; Lee and Hsieh, 2014; Greenaway, Guariglia and Yu, 2014).

In a metaphorical sense, the permission for foreign minority control of the Chinese state-owned banks can be considered as using goats to improve sheep's fitness by producing a "hybrid" between the goats and sheep. As previously indicated, similar to how Mongolian nomads incorporate only a few goats in their sheep herds, only a small portion of the Chinese banking market is occupied by the foreign-owned banks. It was argued that such arrangement is beneficial for the growth of state-owned banks as foreign-owned banks' goat-like intelligence and vigilance behaviour give state-owned banks a learning opportunity to identify areas for improvement (Xu and Wang, 1999; Chen et al., 2006, Gul, Kim and Qiu, 2010; Hasan and Xie, 2013). In addition, the foreign banks can now directly affect Chinese state-owned banks through control of ownership, and, as suggested, this interaction brings positive influences and tangible benefits for state-owned banks. In metaphorical language, a “sheep-goat hybrid” has been created by the ownership-restructuring process as part of the Chinese government’s banking reforms. The improved performance observed in sustainability reports have proven that although the Chinese state-owned banks still display sheep-like characteristics (being submissive and obedient), they have also gained some positive goat traits (e.g. improving corporate governance and efficiency). This demonstrates the evolving nature of the animal metaphors used in this research.

This chapter demonstrated how the multi-tiered “Wolf Totem” metaphor concept can be further applied to describe the behaviour of different types of banks, mapping the Chinese banking sector as an ecosystem and promoting ecosystems thinking in evaluating sustainability reporting. The next chapter provides a conclusion for this thesis, outlines its potential contributions and, limitations, and suggests directions for future research.

Chapter Nine: Conclusion

> The production of 'novelty' and the development of 'new' or 'different' perspectives is an essential characteristic of research that substantively contributes to the production of knowledge.
>
> -Gendron (2013, p.11)

9.1 Thesis Summary

The introduction chapter outlined the purpose of this research as informing a new understanding of sustainability, and hence sustainability reporting practices, from the perspective of ecosystem thinking. An influential novel, *Wolf Totem*, written by Chinese intellectual Jiang Rong to promote ecosystem balance and harmony, is used as the main theme of this research to connect key theoretical concepts and formulate the research design. The background of this research, the Chinese banking sector, was introduced in Chapter Two, which highlighted its ecosystem-like structure and its importance to sustainability.

The review of theoretical concepts and frameworks were organised into the next three chapters. Chapter three defined this research's concept of ecosystem thinking by linking ethically and aesthetically informed ecological thought to the methodology of systems thinking. Using the narratives in *Wolf Totem*, the research informed the ecosystem perspective of sustainability, highlighting that sustainability (and sustainability reporting) should address the interconnectedness of all "species" and understand their dynamic relationship in the holistic "ecosystem" (Table 3). Chapter Four compared ecosystem sustainability with the broadly adopted sustainable development principles, outlining why the concept of sustainable development lacks ecosystem considerations. By providing a review of the literature concerning sustainability reporting, this research identified the gap in the literature where its own focus on the Chinese banking sector can contribute. To provide a vivid and meaningful description of the concept of ecosystem sustainability, Chapter Five outlined the value of metaphor in communicating business discourses. Furthermore, "Wolf Totem" was imposed as a multi-layered metaphor to contextualise the Chinese banking sector as an "ecosystem", communicating the new understanding of sustainability and hence to make sense of Chinese banks' sustainability reporting practices.

The way in which the "Wolf Totem" metaphor has been applied in this research was scaffolded in the next three chapters. Chapter Six outlined the methods used to conduct this research, and established the metaphorical analytical framework that provided metaphorical narratives for Chinese banks' sustainability reporting. Chapter Seven presented the results from a summative content analysis conducted for ten sample banks in the Chinese banking sector, providing metaphorical narratives to draw comparisons between different types of banks' sustainability disclosures and relevant characteristics of their corresponding metaphorical concept. Chapter Eight extended the application of the "Wolf Totem" metaphor, providing metaphorical narratives to comprehend banks' disclosures in response to a series of mega-events, and mapping the Chinese banking sector to reinforce understanding of the different roles each type of banking institution plays. The chapter further suggested that ecosystem balance and harmony are essential for pursuing sustainability.

Conclusions are drawn in this chapter by addressing the three research questions outlined in the introduction chapter. Using Gendron (2013)'s approaches to making research contributions, this research outlines its potential theoretical contributions. Lastly, the chapter reflects on the limitations of this research, and suggest future research directions.

9.1 Addressing the Research Questions

Based on the results presented in Chapter Seven and the discussion in Chapter Eight, this research provides responses to the three research questions as follows.

9.1.1 Banks' Sustainability Reporting Practices

RQ1. How do different types of Chinese banks disclose their sustainability related performance?

In response to research question one, a longitudinal investigation of sustainability reports issued between 2008 and 2012 by ten sample banks across four different bank types was conducted. Summative content analysis was used to identify trends and features relevant for each type of banking institution, as prescribed by the analytical framework established in Chapter Six. Based on findings presented in Chapter Seven, this research identified some important characteristics of Chinese banks' sustainability reporting, and provided understanding of the uniqueness of the Chinese banking sector and the political and cultural context within which it operates.

Although in 2012, all eight Chinese domestic banks studied in this research stated that they had adopted the Global Reporting Initiative (GRI) as a guideline to assist their preparation of sustainability reports, this research's longitudinal results show that domestic influences, especially state policies and the China Banking Regulatory Commission's instructions have tended to have more effect on Chinese domestic banks' sustainability management and reporting. Furthermore, the level of governmental influence has intensified in proportion to the level of state-ownership. Section 7.2.2 and 7.3.1 outline that sustainability reports issued by state-owned banks and the policy bank (China Development Bank)strongly emphasise their commitment towards state policies and projects in their sustainability disclosure. The sustainability reports of the four state-owned banks and the policy bank examined in this research provided more disclosures regarding fulfilling sustainability responsibilities towards the state, measured by both the report length devoted to their discharge of responsibilities towards the state and the number of state-oriented sustainability issues emphasised. The joint-stock banks progressively reduced their state-ownership (Section 7.4.2) and were able to define sustainability concepts from a shareholder perspective; they broadly adopted innovative approaches when managing sustainability and sustainability reporting. In comparison, the sustainability of studied in this research focused on disclosing their respective market participation in China (and other regions) and mirrored some sustainability practices embraced by their respective foreign parent entities, including the implementation of the *Equator Principles*. Thus, it appears that the government was able to exercise more control and influence over the larger, state-owned banks and the policy bank examined in this research.

Chapter Eight presented a case study of a series of 2008 mega-events to examine how banks' managed their disclosure practices in the face of unusual challenges. It was evident that the Chinese government, via the China Banking Regulatory Commission, also actively intervened in this period by urging banking institutions to react in particular ways and directing their commitment to certain objectives as means of better serving the Beijing Olympic Games, providing relief to areas stricken by the catastrophic Sichuan Earthquake, and minimising the negative impact caused by the Global Financial Crisis by reinforcing risk-mitigation mechanism and stimulating the economy. The China Banking Regulatory Commission's approach suggests that, in the context of the Chinese banking sector, responses to mega-events capable of causing large impacts on Chinese society are considered important sustainability objectives that banking institutions need to fulfil. The fact that the China Banking Regulation Commission urged banks to donate towards the Sichuan Earthquake disaster-relief program, and that banks responded by disclosing their donations (Section 8.1.3.1) further indicates that Chinese banks' sustainability initiatives, even charitable donations, are influenced by political pressure. However, this research holds that the government's involvement in directing businesses' sustainability management and reporting may lead to favourable sustainability performance, as the results showed that Chinese banks achieved growth in 2008-2012 despite global economic turbulence. As the China Banking Regulatory Commission (2008) emphasises, the directives that it made led to favourable conditions that ultimately improved the wellbeing and resilience of the Chinese banking sector, which in turn was important for the banks' contribution to national sustainability objectives.

9.1.2 Metaphor's Explicatory Value

RQ2. How can metaphorical concepts be used to describe different types of Chinese banks explain the differences (if any) in their sustainability disclosure practices?

This research articulated the second question to evaluate how metaphor can be used to provide alternative views to comprehend the sustainability reporting practices in the Chinese banking sector. Informed by the writing of *Wolf Totem*, and the ecosystem thinking model, a metaphorical analytical framework (Table 7) is established to link certain different types of bank's characteristics to attributes of different animals appeared in *Wolf Totem*. The results from analysing the banks' sustainability reports are used as evidence to show the resemblance between different types of banks and their *Wolf Totem* themed animal metaphors.

In summary, by comparing different types of banks and their corresponding metaphors, this research elaborated the idea that a bank's disclosing of sustainability performance aims to fulfil certain functions specific to its role in the ecosystem. By considering different types of banks as animals in a grassland ecosystem, this research presents a metaphorical understanding of the relationship between different institutions in the Chinese banking sector, and highlights the importance of each species' role to the integrity, stability and sustainability of the sector. As a result, the banks' sustainability management and reporting can be viewed from an ecological perspective: as species in an ecosystem, banks need to be responsive and adaptive to changing conditions. Banks' sustainability performance reflects how committed they are to their unique roles and how they contribute to the broader national projects concerning the development of the Chinese economy and social wellbeing.

The results presented in Chapter Seven, and the metaphorical mapping constructed based on these results (Section 8.2) shows that the Chinese state-owned banks are comparable to the sheep in *Wolf Totem*, making significant contributions towards multiple important state policies aiming to developing the Chinese economy. This heavy burden has hindered the state-owned banks' own growth, resulting in their display of sheep-like, submissive, and obedient characteristics, in terms of their disclosure of continuously providing risky and doubtful loans (which are likely to become non-performing loans) to support other Chinese firms. To offset some of the negative effectsof non-performing loans on the state-owned banks, the China Development Bank enacts its dog-like role as a policy bank by injecting funds into risky loans to protect state-owned banks. Moreover, joint-stock banks outperformed the state-owned banks in 2008-2012 in terms of efficiency, displaying gazelles' positive attributes as being more flexible and agile. However, as this research finds, the joint-stock banks were still approximately 60 percent state-owned in 2012, suggesting that the state government still holds control of joint-stock banks, and that the proposition that joint-stock banks are flexible is only relative to the state-owned banks and policy banks. Lastly, the Chinese government has used the foreign banks in the same way that Mongolian nomads use their goats to shape the wellbeing of their sheep, as previously outlined (Section 7.5), foreign banks' growth in the Chinese banking sector is restricted by the Chinese government, although they contribute to the overall sector as "role-models" for state-owned banks.

Furthermore, by corresponding animal metaphors to different types of bank in the sector, this research has emphasised the important role that the Chinese government (especially via its agency, the China Banking Regulatory Commission) has played to monitor and actively intervene in the overall condition of the sector (as portrayed by the human metaphor). The analysis found that, to a large extent, the Chinese banks' sustainability initiatives are regulated and mandated rather than being voluntary. Although the results suggest that to a certain extent, Chinese banks are "forced" to be socially responsible, and their sustainability reporting could be politically motivated, this arrangement could still be a pragmatic approach that ultimately improves the banks' commitment towards sustainability. The investigation on mega-events further demonstrated how the Chinese government interventions politically to direct and coordinate banks' sustainability commitment when facing extreme conditions. The metaphorical relationship between humans and grassland animals enables this research to emphasise that in current context, the government's role is essential and influential in shaping the sustainability reporting practices in the Chinese banking sector.

9.1.3 Incorporating Ecosystem Thinking in Sustainability Reporting

RQ3. How can the ecosystem perspective of sustainability (which is portrayed by using a set of multi-tiered metaphors) be used to comprehend the sustainability environmental setting of the Chinese banking sector?

The third research question aims to comprehend the sustainability environmental setting of the Chinese banking sector from the perspective of ecosystem thinking. The "Wolf Totem" metaphor, and its multi-layered conceptual meanings, are used as a means to communicate that sustainability reporting should be evaluated at the sector level, rather than the individual level, to develop an understanding of the sustainability context of the Chinese banking sector.

By studying different banks' sustainability reports collectively, this research was able to identify some trends and correlate them to metaphorical interpretations. For example, the longitudinal study on the banks' sustainability reports found that state-owned banks ("sheep") continuously improved their profitability and efficiency, but were still relatively less efficient than the joint-stock banks ("gazelles"). The metaphorical interpretation projects that, due to the protection of the government ("human") and policy banks ("dog")'s protection, state-owned banks did manage to become stronger, but were still weak compared to the more independent joint-stock banks. This example demonstrates that when considering the Chinese banking sector from an ecosystem perspective, the relationship between different types of banks, the control functions input from the government, and the overall market conditions are all influential factors affecting the banks' sustainability performance. Embracing an ecosystem thinking model results in the key finding of this research: that managing sustainability at a system level needs to incorporate understandings of the dynamic relationships among all "species" and preserve important positive system feedback in the pursuit of ecosystem harmony and balance.

Thus, the "Wolf Totem" metaphor represents the concept of sustainability this research endeavours to articulate: that ecosystem harmony and balance are necessary criteria for achieving sustainability. As a result, sustainability reporting should not stop at the current level, at which individual business firms disclose their own performances. From the ecosystem thinking perspective, sector-wide, or even national-scale sustainability reporting is needed to evaluate the substantive sustainability impacts of businesses' economic activities on the entire ecosystem. Although this concept of system-level sustainability reporting is far from practical, this research has provided some exploratory efforts to evaluate the value of sustainability reporting from the ecosystems perspective. It argues that evaluating sustainability reporting at the sector level, combined with a systematic understanding of the relationships between different firms in the sector, has the potential to reveal important insights that are relevant to comprehending sustainability beyond the current sustainability reporting practices, which focus on disclosing firms' individual activities and indicators.

9.2 Contributions

According to Gendron (2013), the concept of research contribution is broadly defined, and based on different epistemological assumptions and different value propositions of originality. Using Boxenbaum and Rouleau's (2011, as cited in Gendron, 2013) framework, this research's contribution falls into three approaches: evolution, differentiation and bricolage.

9.2.1 Evolution – Reinforcing Existing Knowledge

As Gendron (2013) suggests, an evolutionary approach aims to strengthen the parts and boundaries of knowledge devoted to a given subject. The level of originality and contribution is then related to how the research fills an identified gap in previous literature.

This research contributes to a number of different bodies of knowledge. First, it provides some insights on the understanding of sustainability management and reporting in the context of China and in the banking sector (Chapter Four), of which both have received relatively little attention in the area of sustainability research. Results from this research suggest that the sustainability reporting practice in the Chinese banking sector is politically influenced and regulated, indicating the need to take national differences into considerations when evaluating sustainability reporting in China.

Second, this research contributes to the literature concerning the Chinese banking sector. Many previous studies have focused on the relationship between banks' ownership structure and operational efficiency (Cull and Xu, 2005; Chen, Skully and Brown, 2005; Ariff and Luc, 2008; Berger, Hasan and Zhou, 2009; Lin and Zhang, 2009; Avkiran, 2011). This research provides complementary findings by extending the research scope to areas of sustainability reporting, suggesting that differences exist not only in different types of banks' financial performance, but also in their approaches to sustainability management and reporting. The use of metaphors enables this research to reinforce existing understanding of Chinese banks' characteristics and relationships by providing narratives based on these metaphors.

9.2.1 Differentiation – Providing Alternative Views

According to Gendron (2013), the same object or context can be studied in many different ways, as a single perspective will not be sufficient to exhaust the object's contributory potential to the advancement of knowledge. Therefore, research can contribute by producing findings that depart from the existing body of knowledge, promoting different perspectives by offering alternatives interpretations and conclusions.

By using metaphorical interpretation, this research comprehends the contents disclosed in sustainability reports issued by firms in the Chinese banking sector, and provides conclusions from the ecosystem thinking perspective, that depart from the conventional approaches embracing system-oriented theories. For example, as stated in Chapter Four, research that embraces legitimacy theory suggests that firm's disclosure of sustainability performance can be considered as a managerial tactic to access organisation legitimacy, which is an essential resource for a firm's survival (Guthrie and Parker, 1989; O'Donovan, 2002; Deegan, 2014; Castello and Lozano, 2011; Williams and Adams, 2013; Chu, Chatterjee and Brown, 2013). This research provides an alternative view that Chinese banks' sustainability reporting could, or should, be considered as an ecological strategy: that as species in an ecosystem, different banks act in specialised roles and functions, with the overall goal of achieving harmony in the sector.

This approach not only provides a different understanding of why Chinese banks conduct sustainability reporting, but also incorporates ecosystem thinking into the evaluation of sustainability reporting, thereby departing from conventional views that sustainability reporting is driven by managerial objectives. As noted, this attempt calls for the consideration of sector-wide sustainability reporting and evaluation.

9.2.3 Bricolage – Combining Theoretical Frameworks

The third approach to research contribution is bricolage, explained by Gendron (2013) as the process of constructing knowledge based on a combination of different materials and the development of a distinctive analytical perspective based a set of intuitions and interpretations, which amalgamates certain concepts or ideas. To achieve this, known theoretical frameworks are combined to provide new insights.

A number of frameworks have been embraced in this research to achieve the bricolage effect. In Chapter Three, ecological thoughts and systems thinking are combined to inform the ecosystem thinking model this research adopts. Furthermore, metaphor is used as the vehicle to incorporate ecosystem thinking into the research design process: a unique "Wolf Totem" themed analytical framework is constructed in Chapter Six to combine the story of *Wolf Totem*, ecosystem thinking and the application of metaphor to develop the very distinctive framework this research uses in conducting content analysis and interpretations.

This research also shows a desire to illuminate. By imposing a multi-tiered set of metaphors that are informed by the novel *Wolf Totem* and ecosystem thinking, this research communicates a new perspective to comprehend sustainability and sustainability reporting practices from the view of ecosystem balance and harmony. Furthermore, "Wolf Totem" is used as the metaphor to elaborate the idea of ecosystem sustainability, and offers a counter-argument to the current mainstream acceptance of sustainable development principles in sustainability management and the adoption of Triple Bottom Line style of individual performance-focused sustainability reporting.

9.3 Limitations

Although care has been taken in the research process, this research is not without limitations. Due to the linguistic characteristics of metaphor, the analysis process and interpretations presented in this research are necessarily based on the subjective descriptions and narratives of the author. As Young (2013) explains, metaphors are always partial, researcher's selection of metaphor(s) are value-laden rather than based upon facts. However, this does not mean that the research is biased or unreliable; rather, the use of metaphor(s) is intuitive and in fact communicates the researcher's choice to emphasise or ignore certain features of Chinese banks.

For example, when comparing the state-owned Chinese banks with sheep, this research focuses on three features – submissive, obedient and (relatively) weak attributes. But, in reality, the state-owned Chinese banks are powerful financial institutions measured by total assets or market capitalisation (Global Finance, 2012). By focusing on the sheep-alike attributes, this research potentially "ignored" some key features of Chinese state-owned banks which others could consider as being important. Thus, the application of animal metaphors to describe Chinese banks could limit this research's potential to provide comprehensive insights of the Chinese banking sector.

However, as stated in Chapters Five and Six, the real value of using metaphors is not to provide a perfect match between objects and metaphors, but to create spaces of abstraction that can be used to further develop understandings. Thus, although the metaphors used in this research could result in a subjective and partial interpretation of the Chinese banking sector, the significance of the application of metaphor is that it has the potential to elaborate ecosystem thinking.

This research used publically available information as the main source of data. Thus, reliance was placed on the data as disclosed in the banks' sustainability reports and the China Banking Regulatory Commission's released information. The accuracy, validity, and reliability of this data, however, are not the concern of this thesis. Rather, of interest was how the information was disclosed and portrayed as a representation of the sustainability performance of the banks studied.

9.4 Future Research

While narrative has been used here to study the social phenomena of the banking sector in conjunction with the "Wolf Totem" metaphor, a further application of metaphor to make sense of any "ecosystem" could be of interest for future research.

On a smaller scale than the examination of the banking sector here, metaphorical concepts could be applied to the evaluation of an individual organisation's ecosystem to conceptualise the functional relationship between different elements of the organisation. Ecosystem balance and harmony could also be portrayed as key criteria for organisational development and growth. In a broader context, ecosystem balance is important for a country's economic development across all industrial sectors, or even for the world's overall growth through pursing balance and reducing gaps between the developed and developing nations across continents.

A unique opportunity presents in the context of the Chinese economy for the further application of metaphors (most particularly, the sheep metaphor). Other sectors in the Chinese economy, especially those pillar industries dominated by state-owned enterprises or even state monopolies and oligopolies (for example, the Chinese steel industry), exhibit similar characteristics to the state-owned banks. These sectors are not only important for the Chinese economy, but are also fundamental to sustainability issues in China, including employment and environmental pollutions. In a controversial yet viral broadcast, renowned Chinese journalist and writer Chai Jing[25] criticised the current condition of state-owned enterprises in pillar industries for inefficient management and lack of innovation. More importantly, she blamed these state-owned firms for causing severe environmental degradation. Using a metaphorical approach to examine these sectors could potentially gain a better understanding of the current stasis of the business ecosystem, and allow and evaluation whether the holistic system is unsustainable due to imbalance and unharmony.

To conclude, this thesis has provided: a demonstration of applying metaphor to making sense of the sustainability reporting practices adopted by the Chinese banking sector; a call for appreciation of ecosystem thinking in conceptualising sustainability; and a defamiliarised concept of sustainability represented by the "Wolf Totem" metaphor, which highlights the value of ecosystem balance and harmony.

[25] "Under the Sky", 苍穹之下, https://www.youtube.com/watch?v=KR-OMEq9v8A

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