

Metaphorical Depictions of the American and Chinese Economies during the 2010 Financial Crisis

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DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

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Abstract

This thesis contributes to the critical analysis of metaphors in economic news discourse during financial crisis, aiming to explore metaphorical images of the American and Chinese economies in economic news articles as representatives of distinct cultural and ideological backgrounds. It also examines whether these metaphorical depictions convey varying attitudes towards the two countries. In this study, I analyzed metaphors in economic news articles from *The Economist* during and immediately after the global American subprime mortgage crisis (2010-2011), with a specific focus on China and America. To enrich this field, a corpus-based research methodology was employed within the CCL framework, supplemented by Pragglejaz Group's Metaphor Identification Procedure (MIP) developed in 2007. Furthermore, to avoid relying solely on personal intuition for metaphor identification, Lakoff's Master Metaphor List (1991) and metaphors from relevant studies were systematically utilized for comparative purposes. Additionally, six major categories of economic crisis metaphors generalized by Arrese (2014) and Arrese & Vara-Miguel (2016), along with Charteris-Black's (2004) animate/inanimate metaphor division and van Dijk's (2006) Us/Them ideological polarization (Hart 2014) were applied to categorize and critically analyze metaphors.

The quantitative and qualitative analysis of the superordinate metaphor categories, most frequent metaphor types, and modifications of existing metaphors revealed that both China and America are metaphorically depicted as strong economies. China emerged as a new powerful player with positive economic growth, but there is caution about its future. America was portrayed as being impacted by the financial crisis; however, its outlook remained positive. Both Chinese and American economies were framed under unilateral framing but exhibited differences in metaphor categories and types. The selected economic news articles reported on the Chinese economy using more inanimate metaphors, whereas the American economy was described using more animate metaphors, indicating different ideological distances. The selected economic news reports were not entirely objective nor biased either. These methodologies and findings are expected to offer insights for future research and practical applications in examining the portrayal of countries with diverse backgrounds in economic news articles through metaphors.

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Abbreviations

DA (Discourse Analysis)
CDA (Critical Discourse Analysis)
CCL (Critical Cognitive Linguistics)
CL-CDA (Cognitive Linguistics Critical Discourse Analysis)
CDS (Cognitive Linguistic Study)
CADS (Corpus-Assisted Discourse Studies)
DHA (Discourse Historical Approach)
EU (European Union)
CMA (Critical Metaphor Analysis)
MIP (Metaphor Identification Procedure)
KWIC (Key Word in Context)
LCCM Theory (Theory of Lexical Concepts and Cognitive Models)
UCREL (University Centre for Computer Corpus Research on Language)
USAS (UCREL Semantic Analysis System)
CMT (Conceptual Metaphor Theory)

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Chapter 1 Introduction

1.1 Scope and Significance of this Thesis

Economic news serves as a valuable source for the public to access economic trends and information. In today's society, individuals are inundated with various forms of economic news, including newspapers, magazines, and online reports. As a form of public discourse, economic news reflects cultural and societal aspects. Van Dijk asserts that numbers and statistics are crucial in presenting objectivity within news reports (2006, p. 738). Economic news appears neutral and objective due to its reliance on numerical data and authentic evidence. Prominent economic newspapers like *The Economist* claim to be “international”, “independent”, providing comprehensive coverage across global matters while maintaining an “objectivity” of opinion (see <https://www.economistgroup.com/about-us>). However, as long as economic news belongs to the news media, it may be claimed that, as Galtung and Ruge (1965, p. 71) argue, it may ‘accentuate’ newsworthiness which means ‘the cumulative effects of the factors should be considerable and produce an image of the world different from what really happened’. It also involves ‘selection’, ‘distortion’ and ‘replication’ in a more hidden way associated with the stance / position of its producers including its ‘principals (news media as institution), authors (journalists and reporters), and editors and animators (digital software, technicians, correspondents)’ (Bednarek and Caple, 2012, p. 24). As a product of social practice, economic news is inevitably influenced by social ideology. News producers’ or reporters’ attitudes and power tendencies are implicit in it.

Especially during economic crises or in the immediate aftermath, which are the focus of this thesis, ‘the role of media in shaping and disseminating narratives about the economy’ (Power, Ali and Lebdušková, 2019, p. 2) may be distorted due to its inherent political stance. Therefore, it is crucial to employ Critical Discourse Analysis (CDA) on economic discourse to uncover underlying power dynamics and embedded ideologies. As Fairclough argues that the topic of crisis serves as a valuable entry point for CDA (Fairclough, 2010, p. 5-6).

CDA integrates research findings from linguistics, sociology, mass media studies, and other disciplines to examine the interplay among language use, power and ideology. This field investigates how texts perpetuate and reinforce discursive sources of power, dominance, inequality, and bias within specific historical, social and political contexts (Sheyholislami, 2001, p. 1). According to Fairclough (1989), ideologies are intricately connected with power structures and language use. Therefore, CDA intends to challenge

common-sense assumptions by raising ‘consciousness of how language contributes to the domination of some people by others’ (Fairclough, 1989, p. 1). Fairclough’s work suggests that there are implicit meanings behind news discourse, including economic news, and it is valuable to study them critically.

CDA methodologies exhibit significant variations; however, there has been a predominant focus on the utilization of Halliday’s Systemic-Functional Grammar, which has greatly influenced much of the CDA research (Hart, 2010, p. 19). Consequently, relatively less attention has been given to cognition since the late 1970s (O’Hallaran, 2003, p. 2), with inadequate explication of research methods in Cognitive Linguistics (Hart, 2010, p. 23). Furthermore, Gibbs (2006, p. 7; Hart, 2010, p. 24) notes a scarcity of published writings on methods in Cognitive Linguistics. I concur with Núñez-Perucha (2011, p. 97) that cognitive linguistics can serve as a potent tool for CDA. Moreover, multidisciplinary studies focusing on ‘triangulation methods’ hold great significance for future development in Critical Cognitive Linguistics (CCL) (Zhang and Yang, 2019, p. 1). The emergence of CCL as an interdisciplinary field (Chilton 2004; Zhang and Jiang 2008; Hart and Lukes 2009; Hart 2010, 2011, 2014, 2018a; Zhang 2019) represents a growing synergy between Critical Discourse Analysis (CDA) and Cognitive Linguistics (CL) that has garnered considerable attention from international academia within both CDA and CL domains (Zhang and Zhang, 2020, p. 628, 629).

This study aims to adopt a critical discourse analytic cognitive perspective for the analysis of economic news articles, emphasizing the integration of CDA and cognitive linguistics, with a specific focus on Cognitive Metaphor Analysis (CMA), as metaphors are highly persuasive rhetorical figures in language expression (van Dijk, 2006, p. 738). However, this study goes beyond traditional CMA by incorporating not only cognitive metaphor theory but also the theory of cognitive categorization to analyze metaphors. As a result, the identified metaphors in this study can be clearly categorized. This expands the scope of cognitive metaphor research and overcomes the limitation of solely relying on metaphor theory within the cognitive approach of CDA (further explained in subsections 2.2.1 and 2.3.3). Additionally, following previous studies by Charteris-Black (2004), Baker *et al* (2008), Bickes *et al.* (2014), Arrese (2015, 2016 and 2021) among others, this thesis incorporates Corpus Linguistics (CL) to examine discourse by utilizing corpus-studying tools for analysis purposes. Moreover, it contributes to Corpus-Assisted Discourse Studies (CADS) not only through using corpus tools to search for metaphor expressions in news articles like previous research but also by employing the corpus tool to search for manually marked metaphor types and generate lists of frequently occurring metaphor types

systematically. Consequently, all metaphor types can be systematically categorized into different main metaphor categories. Specific methods for recognizing and marking metaphors are detailed in Section 3.4. In addition, unlike previous corpus-assisted CMA research that primarily identifies metaphors at the word or phrase level without considering their association with linguistic context, this study adopts sentences as units of analysis for manual examination while combining them with lexical-level corpus searches using AntConc. This approach addresses the common criticism that CL tends to disregard context (Baker *et al.*, 2014, p. 279). In terms of linguistic data selection, this study focuses on news articles from *The Economist* depicting the Chinese economy and American economy during and in the immediate aftermath of the world-influential US subprime mortgage crisis (2010-2011). It aims to analyze how these two economies are metaphorically portrayed by examining prevalent metaphors and investigating whether different attitudes, power relations, and underlying ideologies towards China and America are involved in these metaphorical depictions.

1.2 Reasons for Choosing the Representation of China and America in the Context of the Mortgage Crisis

China and America hold the top two positions globally in terms of Gross Domestic Product (GDP). These two nations exhibit both similarities and differences. They share comparable land areas, with China covering 9.6 million square kilometers and America spanning 9.37 million square kilometers (Ministry of Foreign Affairs-The People's Republic of China, 2024). Additionally, they are members of influential international economic organizations such as IMF, G20, WTO, and the World Bank. However, despite their significant size and influence, these countries differ socially, culturally, economically, and ideologically. While America represents a developed country embodying Western culture and ideology; China is a developing nation characterized by its dense population and Eastern cultural heritage.

America has held the position of the world's largest economy for many years, while according to GDP rankings China's economy surpassed Japan's in 2010 and officially became the second-largest economy in the world (see <https://www.economist.com/graphic-detail/2010/08/16/hello-america>). This occurred during a critical moment following the American subprime mortgage crisis. The subprime mortgage crisis of 2008, 'triggered by the bursting of the US housing bubble', is widely 'regarded as one of the most severe financial and economic crises since the Great

Depression and World War II' (Brambilla 2019; Schecher, 2010, p. 150; Deflem, 2011, p. ix). It subsequently led to a global recession that affected not only the United States but also Europe, China, and numerous other countries. The impact on 'world markets resulted in a general economic decline' is 'still underway in most countries' (Brambilla, 2019, p. 269). It is worthwhile to compare how the economic press portrayed the two economies with the highest GDP rankings during a critical period when China's economy was on the verge of reaching the top and the American economy had maintained its leading position for years. The examination of whether the two countries' economies were portrayed positively or negatively is valuable for discussion.

Based on the aforementioned, this study aims to critically examine the metaphor portrayal of the two countries' images in economic news discourse following the American subprime mortgage crisis (post-2008), coinciding with China's rise to become the world's second-largest GDP. The objective is to provide 'an international perspective' and broaden 'the view by 'comparing' how 'different countries' are portrayed or treated in media coverage (Bickes, Otten and Weymann, 2014, p. 424), rather than solely focusing on newspapers reporting their own country's economic events. Thus, this thesis selects economic news articles from *The Economist*, a widely read and influential British media with a substantial global circulation of over '1.2 million subscribers' that covers global events, as the dataset. *The Economist* positions itself as 'international and independent' (see <https://www.economistgroup.com/about-us>) and with 'one of the most trusted sources of global news and analysis' (see <https://www.economistgroup.com/press-centre/the-economist/the-response-to-covid-19-depended-on-state-of-the-art-advances-few>). The Economist Group emphasizes its commitment to 'objectivity of opinion, originality of insight, and advocacy for economic and political freedom', which distinguishes it from other publications (see <https://www.economistgroup.com/about-us>). Being based in the UK away from both America and China may enable it to offer a neutral description regarding these two countries. However, it might reflect a Western stance in terms of how events are reported and analyzed as well. A detailed introduction of *The Economist* as data source for this analysis are provided in Section 3.2.1.

1.3 Rationale for the Suggested Methodological Synergy

News discourse may inherently guide the public to follow certain lines while reading. However, what these lines are is not obvious; 'we may not even know what exactly these deeper problems are or how they' are 'formulated' (van Dijk, 1990, p. 11). At this point,

one way to find out is by looking at the language used. Concepts, thoughts and ideologies embodied in news discourse can be revealed by analyzing systematically the language used under a cognitive theoretic basis, such as metaphor and metonymy and their categorizations.

Cognitive linguistics “is an approach to language that is based on our experience of the world and the way we perceive and conceptualize it” (Ungerer and Schmid, 2001, p. F36). It employs fundamental cognitive models to elucidate the mechanisms underlying language use. Language ‘is for the linguist and cognitive scientist a window to the mind’ (Fauconnier, 1999, p. 96). Lakoff and Johnson (1980, p. 3) reason that ‘since communication is based on the same conceptual system that we use in thinking and acting, language is an important source of evidence for what that system is like’. Cognitive Linguistics could hence offer ‘the systematic theory of language and cognition that CDA seems to need’ (Koller, 2005) and ‘provide theoretical and analytical opportunities for the critical assessment of ideologies’ (Dirven *et al.*, 2007, 1236; Hart, 2010, p. 24). On one hand, CDA analysts aim to examine how language expressions in discourse can be manipulated and how readers may become ideologically assimilated, leading to potential mystification. On the other hand, cognitive linguists’ studies can effectively explain readers’ cognitive process while reading discourse, to reveal how they understand certain language expressions, for example, metaphorical or metonymic expressions; and why they understand them in the certain way. Thus, applying cognitive linguistic theories to uncover the power and ideology embedded in language is useful and appropriate. By analyzing the ‘meaning of words and language expressions’ (Fairclough, 1989, p. 93) as well as ‘language use’ (Fairclough, 2010, p. 36) in discourse from a cognitive perspective, relations between language and ideology in discourse can be revealed. In this sense CDA ‘entails a cognitive approach to discourse’ that accounts for ‘meaning construction’ in ‘the interpretation of text’ (Hart, 2010, p. 23). Thus, applying cognitive theories to CDA is effective in achieving its aim of providing ‘the systematic theory of language and cognition’ that CDA requires (Hart, 2010, p. 23; Koller, 2005). Following previous research (Charteris-Black, 2004; Baker *et al.*, 2008; Bickes *et al.*, 2014 and Arrese, 2015, 2016 and 2021 as already mentioned in Section 1.1), in this thesis I systematically analyze cognitive metaphors in economic news discourse to uncover how the text producers ‘textualize’ language and expressions to convince the public.

Moreover, this research adopts corpus-based method to provide abundant linguistic examples to explain the meaning of discourse. Corpus linguistics can be integrated into CDA both to gain new insights into discourse that might have otherwise been overlooked

and to address the ‘issues of representativeness and generalization that we previously mentioned’ (Subtirelu and Baker, 2018, p. 109). Besides, corpus approaches can provide more precise estimations of textual feature frequencies and a more transparent methodological description of how such estimations are derived compared to ‘fully qualitative research relying on only a limited number of texts’ (Subtirelu and Baker, 2018, p. 109). The utilization of corpus tool in my study will facilitate the identification of marked metaphorical expressions and enable accurate estimation of cognitive metaphor types’ of frequencies in economic discourse. Consequently, the frequent, representative, and salient metaphorical descriptions can be generalized when analyzing the objects under study (the American and Chinese economies). Detailed procedures for identifying metaphors, coding data sets, constructing corpora, as well as conducting analyses are expounded upon in Section 3.4.

1.4 Aim and Research Questions

This study aims to explore how Chinese and American economies are metaphorically depicted and to reveal probable underlying power, ideology and discourse positions towards China and America contained in the metaphors in economic news articles selected from *The Economist*. In accordance, the specific research questions this study examines are:

RQ1: What are the most frequent metaphors used to describe the Chinese and American economies in *The Economist* between 2010 –2011?

RQ2: Are there any differences between the way the Chinese and American economies are metaphorically depicted?

RQ3: If there are differences what do these indicate about the ideological position of *The Economist* towards these countries?

In order to answer these questions, this research would investigate metaphors based on their types, how they are told and the tones conveyed. These three aspects can be collectively referred to as ‘3 Ts’- Type, Tell and Tone. By examining how metaphors are categorized and typed, how they are described and told in detail and what are the tones behind metaphor language and its linguistic context, the underlying attitudes from *The Economist* construing the two countries images might be revealed. Thus, in my analysis and examination of the metaphors, I will focus on these 3 Ts. What they encompass within this research framework, why they hold significance for my analysis and what they help to uncover are further explained as follows:

1. If there exists underlying power and ideology in economic discourse in *The*

Economist regarding the Chinese and American economies, metaphors would be framed under rather the same metaphor categories and described by similar metaphor **types** without corresponding well with economic diversity or ‘the real impact on different countries’ of the crisis but rather ‘contributed to the spread of a unilateral and homogeneous view’ (Arrese, 2016, p. 134). Therefore, it is necessary to calculate and compare the categories and frequent metaphor types in order to determine their extent of similarity or dissimilarity in proportions. And the frequent metaphor types need to be explained with representative examples.

2. If the press or news reporters hold implicit ideological positions, the type, meaning or expressions of metaphors in news discourse would be **told** or described differently. The specific content of metaphors on a micro level can provide insights into the implicit ideological information. The ‘choice of metaphor is important in determining the type of story a financial reporter is trying to **tell**, his own stance towards the narrative and the value system of cultural within which he is operating’ (Charteris-Black, 2004, p. 135). One possible ideological strategy involves associating ‘our’ group or party with positive achievements while linking political opponents to negative topics such as ‘violence and war’ (van Dijk, 2006, p. 734). Thus, the analysis needs to focus on the detailed **telling** or narratives using metaphorical expressions in describing Chinese and American economies and discuss whether China or the United States are told or portrayed with good or bad metaphorical images. For example, examining whether they are depicted as ‘offender/victim’ (Bickes et al., 2014, p. 427; Charteris-Black, 2004, p. 26) during economic crisis like the subprime mortgage crisis; evaluating whether their governments are characterized as ‘savior/destroyer’ during economic depressions; considering whether China or America is regarded as a ‘cooperator /enemy’ (van Dijk, 2006, p. 734); exploring if there has been economic recovery or development following financial crisis; assessing if there is a promising economic future; and investigating whether conflict-related metaphors such as WAR metaphors are frequently employed – all these issues can reveal implicit ideological positions present in the economic newspaper articles.

3. The tone here represents bipolar structures of ‘positive/negative’ (van Dijk 2006; Charteris-Black 2004; Baker et al. 2008; López, A. M. R. and Llopis, M. Á. O. 2010; Chow 2010; Hart 2014; Bickes et al. 2014; Arrese 2015; Arrese and Vara-Miguel 2016) and ‘animate/biological or inanimate/mechanical’ (Charteris-Black 2004; Chow 2010; Arrese 2015; Arrese and Vara-Miguel 2016) evaluations of news ‘authors’ (Charteris-Black, 2004, p. 136), as reflected through metaphor conceptualizations in news discourse. If *The Economist* holds different attitudes towards China and America, the **tone** in metaphorical

descriptions and in relation with the context would contrast. One economy would be diminished through more negative metaphors, while the other portrayed more positively. Alternatively, when combined with the linguistic context, the news could portray a symbiotic and mutually beneficial relationship that fosters closer ties between these two countries with distinct cultural backgrounds. As Charteris-Black (2004, p. xii) posited, economic news can act as a unifying force and foster ‘symbiosis’, “bring the world closer tighter but not pulling it apart to create economic fear”. Thus, it is imperative to investigate whether metaphors ‘evaluate’ the Chinese or American economy in a ‘positive or negative’ **tone** based on their economic situation or ‘pessimism/optimism’ economic ‘outlook’ (Charteris-Black, 2004, p. 135, 146). In other words, this ‘tone’ represents an attitude that indicates whether the metaphors are described with positive or negative connotations. Sometimes interpretation or evaluation may be required based on how these metaphors are employed within the linguistic context of discourse. Additionally, consideration should also be given to ‘animate/biological or inanimate/mechanical **tones**’ as they ‘constitute and reflect shifts in belief and ideology’ within metaphor selection (Charteris-Black, 2004, p. 137).

From above, analysis from the perspectives of the 3 Ts aids in uncovering prevalent metaphor descriptions of the Chinese and American economies, their general images as portrayed through metaphors, as well as revealing underlying ideological positions and attitudes towards these two countries in the selected economic discourse.

1.5 Thesis Structure

This thesis consists of six chapters.

Chapter one provides an introduction to the research scope and significance of this study. It presents the reasons behind selecting China and America as representations in economic news articles during the globally influential financial and economic crisis - the US subprime mortgage crisis. Furthermore, it outlines the rationale for adopting the suggested methodological synergy, highlights the research questions, and clarifies the organization of this thesis.

Chapter two provides a comprehensive literature review on critical discourse analysis. Firstly, it presents an overview of the field, including essential concepts such as CDA and its fundamental assumptions, the definition of discourse and critique, and the interconnected relationships among power, ideology, and discourse. Additionally, various research approaches in CDA are discussed, encompassing cognitive and corpus methodologies. Subsequently, previous studies on CDA applied to news discourse are

examined along with an exploration of the ideological role of the press and power dynamics within economic news discourse. Furthermore, this chapter illustrates cognitive theories that are employed in this CDA research project – specifically focusing on cognitive metaphor and categorization. Lastly, prior investigations into metaphors used in economic news are reviewed. The rationale behind using cognitive and corpus approaches in this thesis would be used in the analysis of articles from *The Economist* and previous CDA studies pertaining to economic crises are stated.

The methodology and data collection are detailed in Chapter three. This chapter begins by presenting the data source and its collection and selection. Subsequently, it explains the process of identifying and coding metaphors via MIP manually compared with Lakoff's Master Metaphor List (1991), as well as utilizing AntConc as a corpus tool. Furthermore, it illustrates the building and utilization of the metaphor corpus.

Chapter four and five critically analyze the language data selected during the financial crisis associated with Chinese and American economies from cognitive perspective. The metaphors identified from *The Economist* describing China's and America's economies are analyzed and explained in terms of their metaphor categories and types, how they are metaphorically told and described, as well as the positive/negative and animate/inanimate tones in metaphors. The analysis aims to reveal how these two economies are metaphorically portrayed and uncover any underlying power, ideologies, attitudes, and perspectives embedded within the metaphor language used in the dataset.

In chapter four, the examination is conducted on economic news discourse related to the Chinese economy to unveil its depiction through categorizations of metaphors along with frequent and recent metaphor types. This section demonstrates how categorization can be combined with critical metaphor analysis (CMA). The metaphors are examined both quantitatively and qualitatively based on their categorization frequencies while also being compared to previous studies in the same field. Various metaphor types are exemplified and explained throughout the analysis.

Chapter five explores metaphors selected from economic news discourse describing the American economy. Similar to the preceding analytic chapter, all the metaphor types are identified and categorized. They are compared with those found in previous studies in the similar field as well. Frequent and more recent metaphor types are illustrated and explained with examples.

Chapter Six compares metaphorical expressions discussed in the previous two analytical chapters, which were employed by *The Economist* to depict the economies of China and America. This comparison is based on various aspects including metaphor

categories and types, specific ways of metaphor descriptions, as well as positive/negative and animate/inanimate tones. This chapter then summarizes the findings and draws conclusions from the analysis in order to address the research questions: what the most frequent metaphors are used to describe the Chinese and American economies in the linguistic data, how they shape the metaphorical images of the two countries, and whether and how the *The Economist* expresses ideological positions toward China and America indicated through these metaphors. Contributions and limitations of this study and implications for further research are put forward in the end.

Chapter 2 Cognitive Approach of CDA on Economic News Discourse

2.1 Introduction

This chapter provides an overview of previous critical discourse studies on economic discourse, with a specific focus on metaphor studies during financial crises. Section 2.2 begins by introducing Critical Discourse Analysis (CDA) and its various research methods, particularly the CDA approaches that are utilized in this study - Cognitive Linguistic CDA and Corpus-Based CDA. It then explores CDA applied to news discourse, highlighting the ideological role of media press and discussing the presence of power and ideologies within economic news.

Section 2.3 delves into the cognitive theoretical basis employed for language data analysis in this study, including cognitive metaphor and categorization theory. This section outlines the conventionalization of metaphor, its overlap with metonymy and personification, as well as the categorization of different levels of metaphors.

Section 2.4 examines CCL on economic news discourse, with particular emphasis on economic and financial crises. Subsection 2.4.1 investigates previous explorations conducted through CDA on economic news discourse while exemplifying current cognitive-based CDA investigations and presenting relevant studies conducted on *The Economist*. Subsequently, subsection 2.4.2 illustrates existing CDA studies pertaining to economic crises.

Finally, Section 2.5 summarizes this chapter by stating the distinctive aspects of my study with previous research endeavors and reinforcing the research questions.

2.2 CDA on News and Specifically on Economic News Discourse

Section 2.2 focuses on CDA's application to news discourse, particularly in the context of economic news. CDA examines how discourse is intertwined with power, ideologies, and institutions, providing a broader critique of social reality. The initial part (Section 2.2.1) provides a concise overview of key concepts in CDA, including discourse, critique, power, ideology, and their interconnectedness with discourse analysis. It also highlights various CDA methodologies, particularly the Cognitive and Corpus-Based approaches adopted in this thesis. This section also illustrates previous critical studies on news within the framework of CDA and highlights the ideological role played by media press (Section 2.2.2), emphasizing the necessity for critical analysis when examining economic news discourse (Section 2.2.3).

2.2.1 The Essence and Research Approaches of CDA

In CDA, the notion of ‘discourse’ integrates two layers of meaning: beyond traditional language structure and performance it combines terms influencing language expressions and performance — underlying power and ideology. This study for instance, beyond the analysis of language structure, it also focuses on how underlying power and ideologies may manifest within economic discourse. By examining language performance (specifically metaphorical expressions in this study) within economic discourse, this study aims to reveal potential ‘relations of inequality’ highlighted by Fairclough (1985).

In the early works of CDA, ‘ideology was a central concept and category’ (Fairclough, 2010, p. 25). However, some researchers now question the significance or usefulness of ‘social class’ or ‘ideology’ (Sayer, 2005). Fairclough argues that ‘capitalist societies like Britain’ are still characterized by class relations (2010, p. 25), although power relations in such societies involve not only class but also different cultural or ethnic relations. These various power relations give rise to power differences and inequalities, with ideologies playing a significant role. For instance, CDA can contribute to critically analyzing the financial and economic crisis by assessing whether discourses circulating during this time have an ideological character (Fairclough, 2010, p. 26). Therefore, ideology remains a crucial theme and category for CDA.

Ideologies are perceived as manifestations of consciousness or beliefs that rationalize, justify, or legitimize power abuse by authorities or groups of people with their dominant nature, propagating misguided ideas through indoctrination (van Dijk, 2006, p. 728-729). Recurrent linguistic patterns reflect recurrent thought processes (Charteris-Black, 2004, p. 33; Stubbs, 2001, p. 215). The consistent utilization of language expressions establishes an evaluative framework for revealing ‘underlying ideological positions, attitudes and beliefs’ (Charteris-Black, 2004, p. 42). A more prevalent manifestation of social ideologies often emerges from group relations involving conflict or power dynamics between dominant and resistant forces (van Dijk, 2006, p. 730). My thesis aims to investigate how a prominent economic media group reflects reality during influential economic crises ‘as the authority and legitimacy of those who produce’ economic ‘discourse’ (van Dijk, 2006, p. 729; Bourdieu and Eagleton 1994), as well as the ‘particular’ ‘social identities’, ‘relations’ and ‘positions’ that are ‘instantiated’ and ‘signified’ by the objectives being described in the ‘social world’ within economic discourse (Al-Hejin, 2012, p. 14; Fairclough, 2003, p. 124; James Gee, 1996, p. viii). In line with van Dijk’s perspective, which suggests that ideologies can be both positive and negative, ideological belief systems are ‘socially

shared' among 'specific social groups or ideological communities' (van Dijk, 2006, p. 729). Given the existence of different 'dominant or dominated groups' in the social structure, the ideological group relations can be explored through categorization as either in-group speakers or others, opponents or enemies (van Dijk, 2006, p. 734). The implementation of the 'binary us-them pair of in-groups and out-groups strategy' in discourse reveals implicit in-group protection (van Dijk, 2006, p. 736), and ideologies may exhibit a bipolar nature characterized by 'positive self-presentation and negative other presentation' (van Dijk, 2006, p. 736). The 'ideological square' encompasses strategies such as emphasizing 'Our good things' and 'Their bad things' while 'de-emphasizing Our bad things' and 'Their good things' (van Dijk, 2006, p. 734).

Consequently, a comprehensive examination of ideologies entails assessing the legitimization and justification of ideas through discourse language usage, identifying ideological group relations implicitly presented as 'Us' or 'Them' among the described objects, and analyzing discourse meanings associated with positive/negative attributes or beliefs. Thus, the conducted ideological analysis aims to unveil whether repetitive patterns in linguistic expressions are employed to legitimize any concealed ideologies; whether text producers position themselves as impartial 'narrative commentators' merely neutrally 'describing events', or as in-group predictors who play a 'persuasive role in shaping evaluations of these events' (Charteris-Black, 2004, p. 136); what identities and roles are instantiated by the objectives being described; and whether the objects or events described are linked to favorable or unfavorable characteristics. All these collectively serve to unveil the ideological positions and perspectives conveyed through language portrayals in discourse.

CDA involves a detailed examination of the text itself as an integral part of the analytical process, aimed at addressing social injustices and discrimination (Wardhaugh and Fuller, 2015, p. 299). In essence, CDA considers 'language as social practice' (Fairclough and Wodak 1997; Fairclough 1989; Wodak and Meyer 2001; Locke 2004; Wardhaugh and Fuller 2015) and is characterized by its 'discourse study with an attitude' (van Dijk, 2015, p. 466). The term "critique" is often associated with CDA due to its critical perspective, stance or position (van Dijk, 2009, p. 62; Hart and Cap, 2014), but it should not be limited to mere criticism or observation of negative aspects in society. Instead, critique in CDA aims to 'contribute to political action for change' by enhancing understanding of existing realities along with their problems and possibilities (Flowerdew, 2018, p. 13). Therefore, 'better explanations' are required in CDA critique to foster 'better understanding' (Flowerdew, 2018, p. 13). Through such dissenting research approaches,

critical discourse analysts adopt an explicit position that seeks to comprehend, reveal, and ultimately challenge social inequality. Language in discourse encompasses power relations and ideology, with news discourses leveraging this aspect to potentially influence public awareness through language. However, merely pointing out the problem is not the ultimate goal. “Discourse practices both reflect and construct social reality” (Hart and Cap, 2014, p. 481). In order to fulfill the task to ‘bring about social change’ or progress this research hopes to contribute to similar studies in this area to promote more broad-viewed and comprehensive economic news constructions by exploring underlying perspectives, positions, and attitudes conveyed through metaphor descriptions in economic news articles.

One widespread misunderstanding about CDA is that it is a special method of doing discourse analysis. However, there is no such method: in CDA all methods of the cross-discipline of discourse studies, as well as other relevant methods in the humanities and social sciences, may be used (Wodak and Meyer 2008; Titscher *et al.* 2000). To avoid this misunderstanding, van Dijk (2008b) emphasizes that multiple methods and approaches can be employed in the critical study of text and talk. This is why the more general term critical discourse studies (CDS) is preferred to describe this research field. Nevertheless, most studies continue to use the well-known abbreviation CDA (van Dijk, 2015, p. 466). In my thesis I will use the term CDA without any special purpose or intention to differentiate between these two terms but merely for clarity and ease for reading and understanding. Due to its diverse approaches, Norman Fairclough has outlined criteria for ‘determining what constitutes CDA’ (Fairclough, 2010, p. 11), that CDA involves more than just analyzing or providing general commentary on discourse or concrete texts. It includes systematic analysis of texts and trans-disciplinary analysis of relations between discourse and elements of social process. It is not just a description but normative to address social wrongs and possible ways to mitigate them.

CDA can be better characterized as ‘a scholarly orientation with the potential to transform the modus operandi’ of various approaches and ‘research methodologies’ (Locke, 2004, p. 2). Prominent scholars bring forth different research schools within CDA, such as Fairclough’s Discursive Practice, Wodak’s Discourse Historical Approach (DHA) and van Dijk’s Social-Cognitive Approach. However, Fairclough and van Dijk primarily emphasize the social nature of language by integrating language analysis with social analysis and advocating discourse as a form of social behavior. Readers’ cognitive mechanism is often ignored in critical discourse studies at the social level and ‘have been unjustifiably rejected and excluded from CDA’ (Wodak, 2006, p. 179) Hence, ‘one recent development in CDA’ - Cognitive Linguistic CDA (CL-CDA) or Critical Cognitive Linguistics (CCL) pays special

attention to readers' cognitive mechanism (Chilton 2004; Hart 2010, 2011a, 2014a; Hart and Lukeš 2007; Flowerdew, 2018, p.77; Zhang and Yang 2019; Zhang and Zhang 2020). This branch of CDA originated from scholars like Paul Chilton, O' Halloran, and Christopher Hart. The use of cognitive theories in CDA may not be considered as an extension of van Dijk's Social Cognitive approach; however, van Dijk's social-cognitive diversion may form as a connection that enlightened the shift from social linguistics to cognitive linguistics in research methodologies. The emergence of CL-CDA coincided with the rise of the cognitive linguistic approach, spearheaded by prominent scholars including Langacker (1987, 1991), Fauconnier (1985, 1994) and Taylor (1989, 1995) and notably by Lakoff and Johnson (1980) with their cognitive metaphor theories. Chilton (1996) provided a detailed account of the conceptual framing of the deterrent doctrine during the Cold War era. This book employs conceptual metaphor theory (CMT) in line with numerous other works conducted by critically inclined discourse analysts who have embraced a cognitive perspective, particularly among a new generation of scholars like Bickes, Otten and Weymann (2014) and Power, Ali and Lebdušková (2019), among others.

Cognitive Linguistics is 'an explanatory theory' that provides insights into the 'organization of ideological meaning' (Nuñez-Perucha, 2011, p. 100). CL-CDA emphasizes the 'conceptual nature of meaning construction' and is concerned with modeling the conceptual structures and processes that 'constitute an ideologised understanding of described situations and events' in discourse (Flowerdew, 2018, p. 77). Unlike the social-cognitive approach, it offers a framework to precisely describe social cognitions 'derived from linguistic representations in text' (Hart, 2010, p. 23). For Wodak and Chilton, CDA should attend to cognitive dimension when analyzing discourse in social and political context as it addresses 'a missing link in former mainstream CDS' by considering the mind (Wodak and Chilton, 2005, p. 22). Thus, how people receive and construct information in their minds should be a prime concern for CDA analysts, if CDA is to become a thorough research discipline. A complete account of the spread of ideological prejudice needs to involve both text production and interpretation stages. While previous social perspectives have shown how ideology is encoded in text at the description stage for the first stage in the discourse process; a cognitive approach accounts for 'meaning construction at both ends of the discourse process' (Hart, 2010, p. 23).

Cognitive Linguistics makes available to CDA a set of alternative 'tools' as different theories may be operationalized as methodologies in critical analyses of discourse.

(Flowerdew, 2018, p. 77)

However, most CL-CDA researchers focus on cognitive theories such as conceptual metaphors and image schema on discourse world analysis while other cognitive linguistic theories or technical ideas like the theory of categorization are not explicitly mentioned (This would be further illustrated in Subsection 2.3.3.). This thesis contributes by integrating the cognitive theory of categorization with metaphor study, thereby enhancing the existing methodologies employed in CL-CDA.

The Corpus-Based Approach has thrived alongside the advancements in modern technology. Hardt-Mautner (1995) is credited with being the first to explicitly connect CDA with corpus study. The ‘analyses of frequencies, collocates, and concordances, particularly in political contexts’, gradually gained popularity (Flowerdew, 2018, p. 107). In the 2000s, a sub-branch called Corpus-Assisted Discourse Studies (CADS), led by Alan Partington, emerged with the aim of uncovering ‘non-obvious meanings and identifying questions and puzzles that would otherwise have not been considered’ (Jaworska, 2018, p. 13; Partington 2004; Partington 2013). Partington’s team-built corpora to examine ‘how discourse participants achieve their goals through language use’ or how they differ ‘in their linguistic choices’ (often within political contexts). Unlike traditional CDA studies that involve manual analysis of entire texts, CADS typically utilizes ‘frequency and key word lists’ along with ‘qualitative analyses of concordance’ (Flowerdew, 2018, p. 108). By combining corpus approaches with CDA methods, researchers can obtain more comprehensive data for more precise quantification purposes (Mazid, 2014, p. 29). This integration complements the depth of discourse analysis by providing breadth and enhances generalizability of CDA findings (Mazid, 2014, p. 29). Furthermore, statistics can be actually reported (Gabrielatos and Baker, 2008, p. 7; Mazid, 2014, p. 29). However, the corpus approach does come at a cost as it limits analysts’ time and attention to focus on a single text and to consider the sociocultural context of discourse. Therefore, there needs to be a balance between quantitative and qualitative studies. This thesis adopts a combination of qualitative and quantitative research method thereof.

In short, this thesis adopts corpus-tool assisted methodology accompanied with manual work within cognitive theories of cognitive metaphor and categorization (further presented in Section 2.3) in attaining the aim of CDA.

2.2.2 CDA on News Discourses and Ideological Role of the Press

The study of news discourse has developed greatly in the field of CDA and has become ‘central to CDA’ (Wardhaugh & Fuller, 2015, p. 299), as news plays a pivotal role

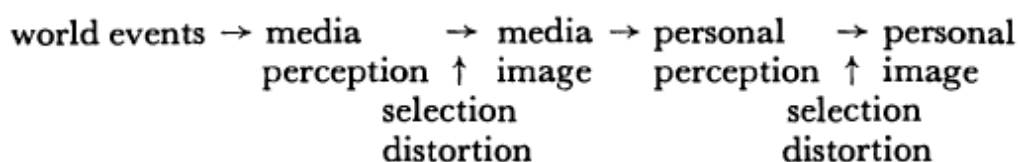
in keeping people informed, particularly during times of crisis. With increased access to information through news media, it appears that our beliefs about the world are influenced (Charteris-Black, 2004, p. xii). For example, during ‘a turbulent time of international affairs’, whether the forces at play ‘bring the world closer together’, or ‘pull it apart through creating and manipulating fear in the news’, may ‘signal social ideological control’ given that ‘we can only be afraid of what the media have brought to our attention’ (Charteris-Black, 2004, p. xii).

Ideology is frequently employed in news media (van Dijk, 2006, p. 728). Van Dijk (1988, p. 100-133) conducted a linguistic and structural analysis of 700 news reports on the assassination of Lebanese President-elect Gemayel in 1982. His research examined the contextual factors and power relations involved in these news reports, revealing that the structure of news discourse is interconnected with societal structures. Fairclough (1989) also demonstrates how CDA can be applied to texts by selecting certain cases from newspapers for analysis. His research aims at raising awareness about how language contributes to the domination of some people by others, suggesting that implicit meanings exist within news discourse and warrant investigation. Fowler (1991, p. xi) further ‘challenges’ readers, students of the media, and journalists engaged in news production to recognize how ‘language can shape rather than’ merely reflect or ‘mirror’ the world and reality. Hart’s study (2010, p. 16-19) examines print news reports on immigration and asylum published between 1 January 2000 and 31 December 2006 – a period during which 3 major bills concerning immigration and asylum were passed and the European Union (EU) expanded twice. Hart’s (2010, p. 17) research further emphasizes the crucial role played by media in CDA as it highlights that people’s understanding of social and political realities often relies not on firsthand experience but rather on exposure to various texts. This aligns with other CDA scholars’ perspectives (Fowler *et al.* 1979; van Dijk 1988a; Fowler 1991; Fairclough 1995b). For Hart (2010, p. 18), the media possesses the ability ‘to manipulate information and thus communicate ideology’.

It is commonly believed that newspaper coverage of world events presents an unbiased account of “hard facts” (Fowler, 1991, p. xi). However, ‘media discourse is influenced by society and vice versa’ (Fetzer, 2014, p. 365). Fowler (1991, p. 223) argues that news does not naturally emerge from reality but rather is a ‘product’ shaped by the social and economic structure as well as the relationships between the government or dominant class and the public/readers. In addition to disseminating information, news serves as a tool for the dominant groups to promote or shape prevailing social values. This process contributes to the creation of ideology or common sense among people through

news content. Galtung and Ruge (1965, p. 65) have pointed out that media acts as a mediating section in the chain of news communication connecting global events with individual readers at both ends. Therefore, critical analysis of news discourse should consider social factors influencing language selection/distortion in shaping news narratives and determining what will capture readers' attention through critical language analysis. The chain of news communication quoted from Galtung and Ruge (1965, p. 65) is illustrated in the figure below. It illustrates that the world events are not revealed directly to individual readers. Instead, they are filtered through media perception, involving selection and distortion by the press. Thus the ideological role of the press is important in forming the media image of these events.

Figure 1 The chain of news communication



(Galtung and Ruge, 1965, p. 65)

Both the relationships between the press and its readers as well as between the press and policy makers are bi-directional (Hart, 2010, p. 18), which are characterized by mutual influence and interaction. Among these reciprocal connections, newspapers possess the authority to determine their reporting content, thereby shaping public concerns, perspectives, and attitudes towards various issues (Hart, 2010, p. 17). In essence, the press wields control over what is featured and how it is presented. Simultaneously, 'the press sculpts public opinion to rationalize policy decisions and thus reflect the interests of policymakers' with mainstream media generally aligning with established power structures (Chomsky, 1989, p. 10). In this way, the press functions as an intermediary between governmental policymakers and the public audience; news discourse is delivered as a social action/production in accordance with the press ideological goals within the constrain of 'media-specific requirements (for instance: channel, length and semiotic representation)' (Fetzer, 2014, p. 367). Therefore, quantitatively, as part of the mass media, news (especially on-line version) produced by the press possesses ideological power due to its ability to disseminate information 'simultaneously to millions of people' (Fowler, 1991, p. 122). Moreover, from a qualitative perspective, 'the economic and political circumstances surrounding the newspaper industry' create 'a vested interest' in shaping ideas from

specific viewpoints, which may vary across different publications. Thus, it is crucial to study the ‘function and expression of a particular newspaper’s’ point of view or world-view (Fowler, 1991, pp. 122). Therefore, the objective of this study is to concentrate on a prominent newspaper and analyze the worldviews portrayed within it.

In short, ‘some primary texts’ (events happened or the policies implemented) and the ideologies they convey are disseminated mainly ‘through other secondary texts’, such as media/news discourse, which provide commentary on them (Koller, 2004, p. 24, *cited in* Hart, 2010, p. 17). As public discourse, news messages ‘can never be neutral because they are mediated’ (Fetzer, 2014, p. 369). As institutional discourse, news discourse ‘are constrained’ by society’s institutional requirements and strategic manners for constructing ‘particular social realities’ (Fetzer, 2014, p. 369-370). And as professional discourse, or a (socio)linguistic variation, producers strategically determine the language to be employed for their ‘intended audience’ (Fetzer, 2014, p. 371). This study aims to explore how language in news media contributes to ‘the formation and reproduction of schematic categories’ through which ‘a society represents itself’ by employing ‘labeling expressions’ that shape and reinforce concepts (Folwer, 1991, p. 120) associated with different countries or interest groups, and by assigning different semantic roles to them in description, thus discriminating among them ideologically and assisting the practice of mystifying mass readers through imbalanced description and meaning construction.

2.2.3 Power and Ideologies in Economic News Discourse

‘The study of the language of economics is a field that is still young’, but is maturing (Power *et al.*, 2019, p. 11). The economic dominance of mainstream press enables a distributional power, which in turn reinforces its economic influence and amplifies its distributional power even further. Consequently, publications with less economic clout find their voices ‘marginalized or even silenced’ (Hart, 2010, p. 17; Knowles and Malmkjaer, 2003, p. 43). However, CDA should delve into ‘how the particular set of views expressed in its narrative come to be so influential’ and elucidating its underlying social vision and ideological principles that ‘support this dominant perspective’ (Kate, 2019, p. 120; Thompson, 1990, p. 56).

Media power lies in its ability to shape ‘the events of the day and the social structure of society’ from a specific perspective (Santa Ana, 2002, p. 51). The press presents and constructs reality through particular perspectives, serving as a ‘structured mediation of the world’ (Fowler, 1991, p. 120). While it is not claimed that the newspapers are inherently biased, they possess power over the selection, extent, frequency and nature of their

reporting. ‘Individual newspapers have a vested financial interest’ in addressing issues that concern their readership while ‘reflecting their views and attitudes’ (Hart, 2010, p. 17). Therefore, newspapers determine which issues consumers are concerned with and shape their perspectives on events; thus giving them the power to control what is featured and how it is presented. Particularly within economic news discourse where viewpoints or decisions revealed (which might arise from different spectrums may differ from professional economists or what has been taught to economic major students) can have ‘far reaching effects on all aspects of social life’ (Power, 2019, p. 2). Thus, CDA should analyze economic discourse through linguistic descriptions (Hart, 2010, p. 17), which forms the focus of this study. For instance, *The Economist*, which will be examined in this study, has positioned itself as an international newspaper; however, it is noteworthy that its largest market is North America (see <https://www.economistgroup.com/about-us>). This could potentially indicate either a neutral global perspective and its diverse readership of the publication, or an implicit endorsement of emotional aspects that resonate with its largest readership with a strategic effort to ‘save’ their ‘face’ in reporting and maintain a ‘positive’ image through ‘impression management’ (van Dijk, 2006, p. 736, 739) – phenomena that will also be explored within the scope of my research.

However, in contrast to political news discourse which often exhibits obvious political aggression, economic news appears to be neutral and innocuous due to its reliance on authentic numbers and data evidence. This may lead to the belief that economic news contains less political manipulation or ideological bias. In comparison, the expression of power and ideologies in economic news reports tends to be more covert. Not all readers can discern that seemingly objective economic news embodies the voices and attitudes of dominant groups who hold societal power, such as governments, policymakers, financial lobbies, ‘media barons, politicians and theocrats’ (Charteris-Black, 2004, p. xii). These voices and attitudes might be acquired and shared by the ‘expertise’ or ‘ideologues’ such as ‘leaders, experts, teachers’ and economic journalists or reporters who can ‘inculcate, explain, teach and reproduce explicitly the group ideologies’ (van Dijk, 2006, p. 119) in economic news. Such ideological voices and attitudes are affecting public consciousness. Without meticulous analyses, readers might not be aware of the ideological impact of economic news on them. However, according to Stam (1989, p. 8, *cited in* Mazid, 2014, p. 25) ‘there is no such thing as a neutral utterance, because language is everywhere’ infused ‘with intentions and accents’. Hence, this research deems it valuable to critically examine economic news discourse.

2.3 Synergy between Critical Discourse Analysis and Cognitive Linguistics

This section explores the intersection of Critical Discourse Analysis (CDA) and Cognitive Linguistics (CL) – Critical Cognitive Linguistics (CCL), which is a subfield of both CDA and cognitive linguistics (Zhang and Zhang, 2020, p. 629). The integration of CDA and Cognitive Linguistics offers a potent tool for ideological research (Nuñez-Perucha, 2011, p. 97). As van Dijk (1990) pointed out in discourses, ‘power abuse and inequality may be expressed or legitimated’ through various means such as ‘rhetoric, persuasive argumentation’, or ‘control of semantic content’ (van Dijk, 1990, p. 11). At the same time, the conceptual system underlying discourse may not be readily apparent to ordinary readers. Hence, it becomes imperative to delve beneath the ‘surface language forms’ and explore the intricate ‘hidden mechanisms’ that drive socially constructed ‘cognitions, ideology, and socio-political-cultural structures’ giving ‘rise to such expressions of interactional inequality in the first place’ (van Dijk, 1990, p. 11). After addressing crucial aspects within CDA approaches relevant to this study, I will now briefly discuss the cognitive framework employed in this research.

2.3.1 Cognitive Metaphor and its Ideological Nature

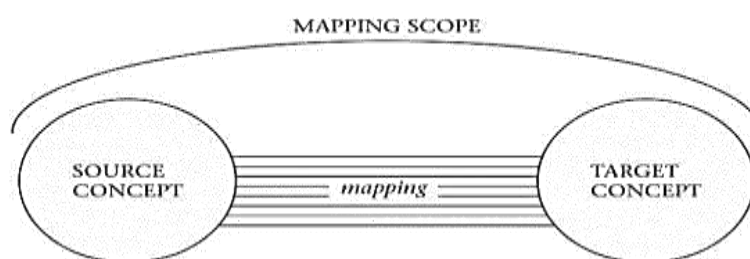
Critical cognitive linguistics employs theories and perspectives from cognitive linguistics to conduct critical research on discourse. The integration of cognitive linguistics with CDA is most effectively achieved through the application of Critical Metaphor Analysis (CMA) (Zhang and Yang, 2019, p. 2). CMA combines conceptual metaphor theory with CDA, originating from the critical examination of metaphor which represents a prolific and prevalent research perspective in political discourse (Chilton 1996; Musolff 2003; Koller 2004; Charteris-Black 2004, 2006; Dirven, Polzenhagen and Wolf 2007; Goatly 2007; Zhang and Yang, 2019, p. 2). The recognition of metaphors’ cognitive potential within the experiential view was initially highlighted by Lakoff and Johnson (1980) (Ungerer and Schmid, 2001, p. F39). Subsequently, the combination of metaphorical studies with CDA has led to a trend towards critical politicization of metaphor studies (Twardzisz, 2013, p. 50; Musolff 2016). In this study, CMA is applied in economic discourse.

Metaphors in CDA attract significant interest due to their varying ‘ideological attachments’ (Fairclough 1989; Zhang and Yang, 2019, p. 2). ‘The category-structuring power of metaphors’ extends beyond ‘lexical categories’ and contributes ‘to our

comprehension of complex political, social, and economic issues’ (Ungerer and Schmid, 2006, p. 4-5). It is this potential that significantly enhances the cognitive content and structure of abstract categories.

Within the cognitive field, metaphor establishes ‘a conceptual link between a source concept and a target concept’ (Ungerer & Schmid, 2006, p. 126), involving mapping between two domains—from the source domain to the target domain. This mapping represents ‘a form of conceptual projection or correspondence’ that exists between these domains (Evans, 2007, p. 136), as illustrated in Figure 2 below which depicts the fundamental components of metaphorical mapping: source concept, target concept, mapping and mapping scope.

Figure 2 Mapping from Source Concept to Target Concept



(Ungerer & Schmid, 2006, p. 119)

The cognitive approach focuses on the ‘target and source concepts of metaphor’ (Ungerer & Schmid, 2006, p. 119). The source domain is the specific or simple category, while the target domain is the abstract or complex one. Lakoff and Johnson employ the ‘formula TARGET DOMAIN IS SOURCE DOMAIN’ to describe the metaphorical connection between these domains (Croft and Cruse, 2004, p. 196). This ‘formula’ (Croft & Cruse, 2004, p. 55) is presented in capital letters with a pattern resembling TARGET DOMAIN IS / ARE SOURCE DOMAIN; where the former represents the TARGET DOMAIN and the latter SOURCE DOMAIN. The two domains are linked by IS or ARE. Concepts in the TARGET DOMAIN are metaphorically expressed through concepts from the SOURCE DOMAIN as readers ‘conceptualize the target category via the source category’ (Ungerer & Schmid, 2001, p. 118). For example, in MONEY IS A LIQUID, MONEY is the target domain and LIQUID the source domain. People can understand the concept of MONEY based on features, properties and attributes of LIQUID. ‘The essence of metaphor’ lies in comprehending and ‘experiencing’ one type of thing ‘through another’ (Lakoff and Johnson, 1980, p. 5). According to this formula it means that we can

comprehend simple concepts in source domains in order to grasp the complex target domain concepts. Alternatively, the target domain concepts are expressed through metaphorical language expressions using source domain concepts. The detailed process of marking metaphors is explained in the data and methodology chapter.

‘The mapping scopes of metaphors essentially reflect our conceptual experiences’ when ‘dealing with the world around us’ (Ungerer & Schmid, 2006, p. 119). Most source domains often draw upon ‘embodied experience grounded in the nature of human interaction with the socio-physical world’ (Evans, 2007, p. 137-138), such as JOURNEY, HUMAN BEING, MACHINE, PLANT, ANIMAL, BUILDING, WAR, GAME, LIQUID, and CONTAINER. The crucial distinction between traditional understanding of metaphor and cognitive metaphor lies in considering metaphors as ‘cognitive instruments’ (Black, 1962, p. 37). ‘Metaphors are not merely a stylistically attractive way of expressing ideas’ through language but also ‘a way of thinking about things’ (Ungerer & Schmid, 2006, p. 118). In other words, the essence of metaphor lies not within language itself but within ‘thought’ (Chow, 2010, p. 28). For instance, in the metaphorical expression ‘*wasting* my time’ (Lakoff and Johnson, 1980/2003, p. 7), the target concept TIME is compared to be like the source concept MONEY which can be wasted, through the use of the metaphorical word ‘wasting’. Here we not only exploit linguistically the TIME IS MONEY metaphor, but we actually ‘conceptualize or think about TIME via MONEY’ as a source concept (Ungerer & Schmid, 2006, p. 118), thus establishing links between two different domains that do not naturally connect. As a reminder, metaphor lexical items in my study are usually shown in italics (see Arrese and Vara-Miguel 2016), as in the *waste* example.

The metaphorical systematicity is about highlighting and hiding in discourse (Lakoff and Johnson, 1980/2003, p. 10). “The very systematicity that allows us to comprehend one aspect of a concept in terms of another will necessarily hide other aspects of the concept” (Lakoff and Johnson, 1980/2003, p. 10). By directing readers’ attention towards specific aspects of concepts, conceptual metaphors can prevent them from noticing other aspects which are inconsistent with the metaphors. Language users can decide whether to employ metaphors, as well as which metaphors to use in language expressions, to highlight or hide certain aspects of an entity or event. For instance, if the invented sentence ‘The recession has influenced this country’s economy.’ appears in economic news report, readers may not be aware whether the country’s economy has been influenced seriously or not by the economic recession. However, if it is metaphorically reported as ‘The recession has *taken its toll* on the country’s economy.’ or ‘The recession is the *nightmare* of this country.’ (invented sentences with the italicized expressions taken from Power *et al*, 2019), readers

are more likely to notice and believe that the country's economy is being seriously affected by the recession, maybe even totally ruined. In reality, though, it might be that the recession did not severely affect the economy. However, from the reporter's exaggerating expression, readers may erroneously focus on how severe the recession is. Hence readers may be misguided when excessive attention is placed onto the highlighted aspects of the seriousness of the economic recession and less attention to the hidden ones that the economy may not be so bad after all or there might be recovering methods. Further,

it is up to the language users to choose or judge whether and how to use figurative expressions simply to be more attention-grabbing, or to conjure up a complex image.

(Croft and Cruse, 2004, pp. 193)

Thus, metaphors are inherently ideological (Chow, 2010, p. 28), functioning 'as systems that generate ideology' by enabling various representations of 'the same' material situation through different choices (Haynes, 1989, p. 119). The ideological nature lies in that 'the creation / re-creation of metaphors' are not arbitrary but rather 'influenced by socio-economic factors' which manifest through shifting patterns of 'usage/distribution' (Hart and Cap, 2014, p. 54). Journalists or discourse writers may opt to employ specific metaphors to serve their ideological purposes. Cognitive metaphors play a persuasive role in discourse by encompassing linguistic and cognitive aspects that influence both words and thoughts (Charteris-Black, 2004; van Dijk 2006). This study aims to identify economic metaphors in order to unveil how language is manipulated within economic news discourse and how socio-economic factors such as economic powers and social-economic status might influence the creation / re-creation of metaphors.

2.3.2 Degree of Metaphoricity

The degree of metaphoricity varies among metaphors, ranging from newly created ones to those that have become fixed in language over time. This process of 'conventionalization' (Ungerer & Schmid, 2006, p. 121) or 'degree of frozenness' (Croft and Cruse, 2004, p. 205) leads to a fading of the metaphorical nature of expressions. The distinction between novel and conventionalized metaphors is not clear-cut but rather exists along a continuum (Chow, 2010, p. 33). Metaphoricity and its conventionalization are matters of degree (Goatly 1997). Newmark distinguishes metaphors into five types: dead, cliché stock, recent, and original; with the first four being conventional and the last one being creative (1980, p. 93). For example, consider the following two examples from

Ungerer & Schmid (2006):

- a) Juliet is the sun. (Shakespeare)
- b) I'll see you at 2 o'clock.

Example a) clearly employs metaphor by comparing Juliet to the sun, while example b) may not be recognized as a metaphor by many readers. In example b), the preposition 'at' extends its locative meaning metaphorically to time, illustrating a TIME IS SPACE metaphor. Thus, while metaphor a) represents a novel creation, expression b) can be considered frozen and widely used in language. Furthermore, metaphorical meanings are not limited by the boundaries of specific parts of speech and encompass various forms such as nouns, verbs or adjectives in source or target domains (Chow, 2010, p. 138). As in example b), the seemingly insignificant and unnoticeable preposition 'at' can convey a metaphorical connotation.

Lakoff and Turner (1989, p. 99) 'distinguished novel metaphors from conventionalized metaphors', referring to the former as 'image metaphors'. Some studies focus exclusively on novel and salient metaphors, considering them significant and eye-catching. For instance, Arrese and Miguel (2016, p.139) identified two prominent metaphors in each economic news article among a database of 6810 articles by targeting easily recognizable 'clearest metaphorical expressions'. However, the Lakoffians argue that certain novel metaphors are actually 'extensions of existing conventional' ones (Croft and Cruse, 2004, p. 203). They suppose it is a 'mistake' and 'highly misleading' to disregard so-called 'conventionalized, lexicalized or even dead metaphors' (Ungerer & Schmid, 2006, p. 117) from a cognitive perspective, given that it is 'the metaphors that have unconsciously been built into the language by long-established conventions are the most important ones' (Ungerer & Schmid, 2006, p. 117).

In my perspective, it is worthwhile to investigate both more recent and conventional metaphors in CMA. Recent metaphors are more impressive and prominent metaphors, potentially establishing 'a systematic mapping between two conceptual domains' (Croft and Cruse, 2004, p. 203). Everyday conventionalized metaphors may have 'lost some of their original properties' irrecoverably (Croft and Cruse, 2004, p. 204), with normal speakers unlikely to 'activate the source domain that the target domain concept is compared to at all' (Croft and Cruse, 2004, p. 205). However, despite their hidden nature making them less obvious or naturalized than recent metaphors, conventional metaphors possess value for analysis in CMA, since it aims to uncover the 'covert (and possibly unconscious) intentions of language users' (Charteris-Black, 2004, p. 34). In discourse practices aligned with concealed purposes, seemingly insignificant elements of issues are

emphasized as prominent to attract readers' attention. In this way, discourses may intentionally mislead readers by diverting focus from crucial aspects through presenting them as background information. Kittay (1987, p. 89) also argues that regardless 'how dead or conventionalized metaphors are metaphors none the less'. From my understanding, conventional metaphors are like pieces of broken furniture or buildings that still remain part of their structures and features as metaphors. Linguistic expressions can employ 'both conventional and unconventional' means to 'tap into the same conceptual structure' to transfer 'certain patterns of reasoning from the source domain to the target domain' (Croft and Cruse, 2004, p. 197). Charteris-Black (2004) argues against solely focusing on creative metaphors in CMA as well. Conventional metaphors are often overlooked in relevant research as they are considered too conventional or even 'dead' metaphors, whose 'metaphoricity' has been forgotten (Rhodes and Garrick, 2002, p. 90), and thus not recognized as metaphors. However, Gibbs (2018, p. 353) suggests that traditional and so-called dead metaphors still reflect metaphorical ideas that remain vividly alive in the minds of contemporary speakers and listeners. These conventional metaphors are 'embedded' within specific 'contexts' and contribute to 'authentic discourse' (Rhodes and Garrick, 2002, p. 90), making their implied meanings valuable to uncover as well. Thus, it is worthwhile studying these conventional metaphors. Despite potentially reducing 'our awareness' (Charteris-Black, 2004, p. 21), Charteris-Black's (2004, p. 36) interest lies 'particularly in conventional metaphors' because they likely contain more 'covert types of evaluation' which align with the purpose of CDA - revealing underlying power and ideologies inherent in language usage. Based on the above, this research would adhere to Charteris-Black's suggestion to 'consider both conventional and recent metaphors' in economic discourse (Charteris-Black, 2004, p. 18). However, as previously mentioned in the first paragraph of this section, 'the boundary between conventional and non-conventional metaphors is not always a clear-cut one' (Charteris-Black, 2004, p. 17) and 'there is only a difference in degree between conventional and novel metaphors' (Croft and Cruse, 2004, p. 204), there might be difficulties in distinguishing between traditional and new metaphors. Furthermore, conventional metaphors might have lost some figurative features and could be difficult to be identified or distinguished from non-figurative daily language expressions. There might need systematic set of standards in the identification of conventional and non-conventional metaphors. Since the publication of *Metaphors, we live by* (Lakoff and Johnson, 1980) which is one of the most influential books in cognitive linguistic tradition, Lakoff and his colleagues 'use evidence from everyday conventional linguistic expressions to infer the existence of metaphorical relations or mappings between

conceptual domains’ (Croft and Cruse, 2004, p. 194). They focus on less discussed and more conventional metaphors (Croft and Cruse, 2004, p. 195) like example b) rather than widely debated ones such as example a). Lakoff *et al.* compiled the Master Metaphor List (1991) (hereinafter referred to as Lakoff’s List (1991)) which is an extensive collection of metaphors consisting of 215 pages. It contains metaphorical expressions from published papers, books and student papers along with their respective metaphor formulae and source domains. This compilation can be considered a comparatively comprehensive and systematic resource for conventional metaphors. Thus, the sense of conventional metaphorical expressions can ‘be brought to life by means of’ the explanations and examples by ‘Lakoffian elaborations’ (Croft and Cruse, 2004, p. 205). Therefore, this study will employ Lakoff’s List (1991) as a reference for comparing and verifying each identified conventional economic metaphorical expression in the selected economic news discourse. If a metaphor is found to be included in the List, it will be considered as a conventional metaphor providing foundational metaphorical information. However, since Lakoff’s List (1991) is over 30 years old, it does not serve as the sole criterion in this study. Recent modifications of existing metaphors identified in relevant research by other scholars will also be considered. Furthermore, cognitive metaphors may exhibit an overlap with traditional figures of speech such as metonymy and personification. Similar to metaphors, these figures of speech also employ figurative language descriptions to replace their literal meanings. Thus, in addition to the degree of conventionalization, this discussion encompasses metonymy and personification which not only ‘involve a metaphorical transfer of meanings’ (Chow, 2020, p. 22) but also possess varying degrees of metaphorical nature.

Metonymy is entailed in (though not entirely identical but similar to) metaphor in Cognitive Linguistics; they interact (Evans, 2007, p. 141). Both metaphors and metonymies serve as potent ‘cognitive tools for our conceptualization of the world’ (Ungerer & Schmid, 2006, p. 114). The fundamental distinction lies in that ‘metaphor involves mapping’ between ‘different cognitive domains’, whereas metonymy entails mapping within a single domain where “one constituent of the metonymic link stands for the other” (Ungerer & Schmid, 2006, p. 115). In simpler terms, consider the metaphorical sentence: “The whole world is a stage” (Ungerer and Schmid, 2006, p. 115). Here individuals need to blend two distinct domains together—the world domain and the stage domain. Conversely, in the metonymical sentence: “The best land here belongs to the crown,” it is effortless to associate ‘crown’ with a king or queen who wears it due to its ‘relation of contiguity or i.e. nearness’ or proximity (Ungerer and Schmid, 2006, p. 115).

The function of vehicle – ‘crown’ in this metonymy is solely to identify the target construal – ‘king/queen’.

Personification is ‘a frequent and conventional type of metaphor’ (Ungerer & Schmid, 2006, p. 115). It enables ‘us to comprehend experiences’ involving ‘nonhuman entities’ by attributing ‘human activities, motivations, goals and characteristics’ to them (Lakoff and Johnson, 1980, p. 33). However, personification differs from metaphor in that it is ‘a general category that covers a wide range of metaphors’ (Lakoff and Johnson, 1980, p. 34). It aims at ‘seeing something nonhuman as human’ (Lakoff and Johnson, 1980, p. 33), while metaphors involve selecting different aspects or perspectives of a person (Lakoff and Johnson, 1980, p. 34). For instance, in the sentence ‘Inflation has **attacked** the foundation of our economy.’ (Lakoff and Johnson, 1980, p. 33), if we recognized it as a personification, it suffices to understand that ‘inflation’ is being personified due to the presence of the human action ‘attack’. However, if we identify it as a metaphor, the identifying process does not end with INFLATION IS A PERSON but extends further to INFLATION IS AN **ADVERSARY** which provide us with a ‘specific way of’ conceptualizing ‘inflation’ (Lakoff and Johnson, 1980, p. 34) as an adversary attacking us, and thus justifying governmental economic actions taking against it. In line with this perspective, Charteris-Black (2004, p. 140) conceptualized ‘financial processes in terms of personification’ as the metaphor ‘THE ECONOMY IS HUMAN’, while also proposing ‘linguistic criteria’ for metaphor definition involving ‘reification, personification and depersonification’ (*ibid.* p. 21), where the latter two refer to the mapping between animate and inanimate expressions.

Based on the aforementioned, although metonymies and personifications were traditionally considered distinct rhetorical devices from metaphor, they all involve comparison or substitution ‘by the literal meaning of a word and its figurative counterpart’ (Ungerer & Schmid, 2006, p. 115) in their conceptualizing process. This implies that the understanding of metonymy and personification aligns with the essence of metaphor mapping, which entails utilizing and comparing one concept in terms of another or substituting/replacing literal meanings with figurative language expressions. Hence they can be viewed as encompassed within metaphorical recognitions; only that metonymy involves mapping between two related domains while personification compares non-human entities to humans. Therefore, in this research, I will not distinguish metonymies or personifications from metaphors in language data analysis as long as they indicate depicting, comparing and mapping one concept of the source domain onto the target domain concept.

2.3.3 Metaphor Categorization

There are at least two ways to analyze metaphors in CMA field. Some studies focus on examining the linguistic expressions of specific metaphor types in discourse. For example, Arrese (2021) explored the metaphorical usage of *bubble* as an economic metaphor in news articles in Spain. Additionally, Tang (2014) and Huang and Guo (2019) identified and provided examples of metaphors employed by British media in immigration discourse and Brexit discourse from *The Guardian*, such as conceptualizing ‘countries as sea’ (Guo, 2019, p. 63) and ‘migrants as *flowing water*’ (Tang, 2014, p. 19), thereby integrating CDA with economic and political discourse from cognitive perspective. Koller’s (2005) study utilized corpus tool to determine the frequency of metaphors like ‘FIGHTING, MATING and FEEDING’ (Koller, 2005, p. 210), drawing evidence from business media discourse to illustrate compatibility between ‘CDA and cognitive linguistics’, specifically in ‘metaphor research’ (Koller, 2005, p. 199). Gao (2016, p. 2632-2634) presented various examples including metaphors like ‘JOURNEY, GAME and WAR’ found in news articles. These studies did not systematically categorize the identified metaphors within discourse. On the other hand, Charteris-Black (2004), Arrese (2015), Arrese and Vara-Miguel (2016), among others adopted a more systematic approach. They not only examined metaphorical expressions or linguistic patterns used within discourse but also generalized these expressions into distinct levels/categories of cognitive metaphors. This approach combines cognitive theories of metaphor and categorization and offers a more comprehensive method for analyzing large amounts of linguistic data suitable for discourse research. In my analysis, I will adopt the categorization approach proposed by Charteris-Black (2004) and Arrese and Vara-Miguel (2016) to classify metaphorical expressions identified in economic news articles. The subsequent paragraphs will introduce and exemplify the cognitive theory of categorization as well as its application in CMA field, drawing upon the works of Charteris-Black (2004) and Arrese and Vara-Miguel (2016).

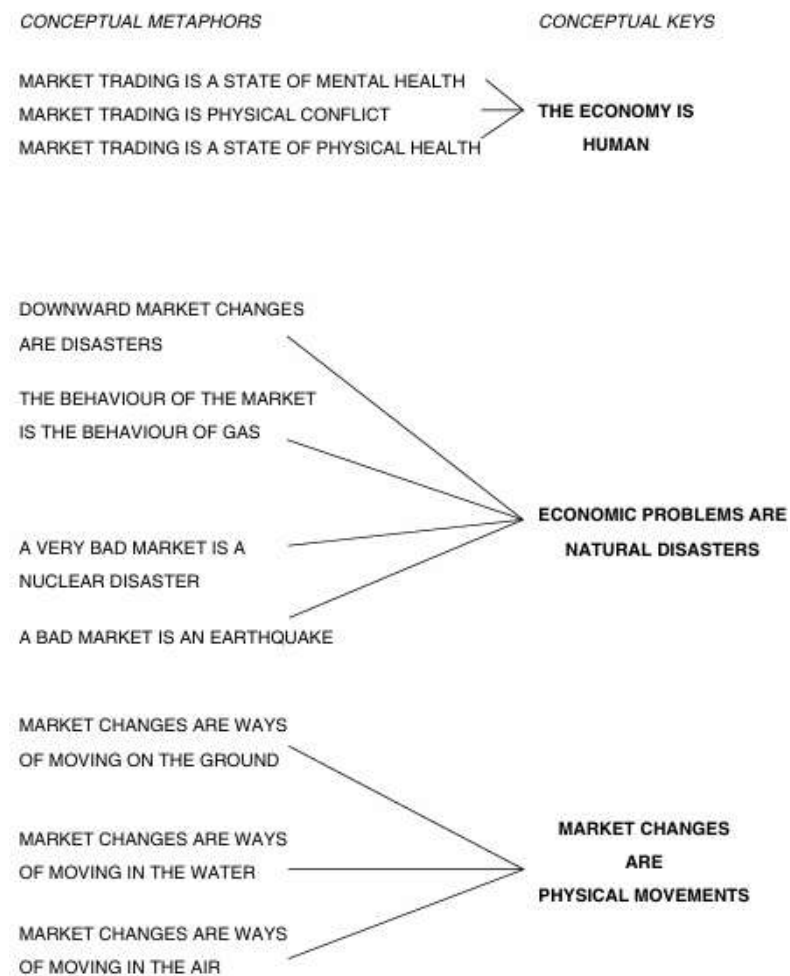
Human beings recognize and learn things in categories. The diverse range of concrete entities, actions and events in the world can be hierarchically ordered (Ungerer and Schmid, 2001, p. 97). And they are classified into three levels of categories - superordinate category, basic level category, and subordinate category (Ungerer and Schmid, 2001, p. 60, 73, 86). The basic level category is of most economic cognitive importance as it effectively fulfills human cognitive needs. It is at this level that we obtain the largest amount of information about an item while perceiving the most apparent distinctions between organisms and

objects of the world. The superordinate category represents a collection of ‘salient general attributes that are shared by all respective basic level categories’ (Ungerer and Schmid, 2001, p. 88). It highlights salient general and mostly functional attributes (Ungerer and Schmid, 2001, p. 78). On the other hand, the subordinate categories serve for specification (Ungerer and Schmid, 2001, p. 88). For example, in the car-categorization, the abstract term ‘vehicle’ belongs to the superordinate category whereas the word ‘car’, which is commonly used in our experienced world, belongs to the basic level; meanwhile, ‘limousine’, or ‘police car’ fall under the subordinate level (Ungerer and Schmid, 2001, p. 67). The underlying principle in this hierarchical structure is the notion of class inclusion—the view that the superordinate class includes all items on the subordinate level. According to this principle, all the cognitive categories are connected with each other in a hierarchical relationship.

From a cognitive perspective, a metaphor can be understood as the ‘mapping of the structure of a source domain onto a target domain’ (Ungerer & Schmid, 2006, p. 118). In cognitive theories, domains represent different levels of categorization. Metaphor involves more than simple substitution or replacement of linguistic words or expressions; it encompasses entire ‘conceptual domains’ evoked by metaphorical expressions (Croft and Cruse, 2004, p. 195). This means in CMA the analysis should focus on different levels of metaphor source domains involved in the categorization process rather than solely examining specific concepts or properties being compared within these domains. As Croft and Cruse (2004) state that metaphor is not confined to ‘individual linguistic expressions and their meanings’ but extend to ‘whole conceptual domains’ (Croft and Cruse, 2004, p. 195; Ungerer & Schmid, 2006, p. 118). Similarly, ‘CDA draws attention to’ ‘stereotyped categorizations in texts’ and explores ‘how language users categorize behavior, actions and attributes’ (Wodak and Chilton, 2005, p. 24).

For instance, Charteris-Black (2004) identified metaphors that incorporate verbs related to ‘military combat, such as *battling*, *fighting*, *protecting*, *defending*, *rallying* and *retreating*’ (Charteris-Black, 2004, p. 143), in order to describe the economic market as a physical conflict in MARKET TRADING IS PHYSICAL CONFLICT. He further classified this metaphor into a higher-level metaphor category as THE ECONOMY IS HUMAN. The categorization of metaphors by Charteris-Black (2004) is presented in the figure below.

Figure 3 Conceptual keys and conceptual metaphors for financial reporting



(cited from Charteris-Black, 2004, p. 142)

It is evident that the provided diagram illustrates two distinct levels of metaphor categories. The metaphors presented in the left column represent basic level categories. These metaphors can be seen as ‘domain-specific realizations’ of those on the right column, which are termed ‘conceptual keys’ and possess a more general nature (Charteris-Black, 2004, p. 210). On the other hand, the right column represents superordinate level metaphor categories. The subordinate level is exemplified by metaphor expressions such as *battling*, *fighting* and *protecting* as stated above.

Cognitive units are not discrete as ‘there are no clear-cut boundaries between categories’ (Ungerer and Schmid, 2001, p. 97). The definition of metaphor category levels may vary among researchers based on their specific research requirements. Arrese (2015) and Arrese and Vara-Miguel (2016) also categorized all metaphorical expressions identified in the analysis on economic press reporting into six metaphor categories, including DISEASE, NATURAL, MECHANICAL, WAR, SPORT & ENTERTAINMENT and ORGANISM (Arrese and Vara-Miguel, 2016, p. 143). These

categories were referred to as ‘general/dominant categories’ in their study. However, unlike Charteris-Black (2004), the boundaries between basic and superordinate levels are less distinct, resulting in a two-tiered metaphor categorization system in their analysis.

A single metaphor does not form a ‘single image’. Metaphors possess the characteristic of ‘being subcategories’ within a larger category and thus share a ‘major common entailment’ (Lakoff and Johnson, 1980, p. 45). Categorizing metaphors can aid in revealing the general attributes of groups of metaphorical expressions, establishing ‘metaphorical coherence’ and ‘intensifying the pragmatic weight’ of their ‘meaning’ (Charteris-Black, 2004, p. 153). Thus, I will follow Charteris-Black (2004) and Arrese and Vara-Miguel (2016) to categorize metaphor expressions identified in economic news articles for analysis. The expressions will be classified into three levels of metaphor categories in my study. Specific procedures and analyses are provided in analytical Chapters 4 and 5.

2.4 Combining CDA and Cognitive Linguistics on Economic News Discourse in Crises

This section presents a synthesis of CDA and cognitive linguistics approaches to examine economic news discourse, particularly focusing on economic crises, as well as relevant CDA studies on *The Economist*.

2.4.1 Previous CL-CDA Research on Economic News Discourse

Previous research on economic news discourse from the perspectives of CDA and Cognitive Linguistics have predominantly focused on conceptual metaphor studies, aiming to analyze and uncover hidden ideology and power within discourse critically through the lens of Conceptual Metaphor Theory (Hart, 2011, p.172). These studies have explored the ‘ideological use of metaphors’ and highlighted their role in shaping particular worldviews in business press (e.g., Koller 2004a; Baker *et al* 2008; Lederer, Laranetto, and Brown 2017; Bickes, Otten and Weymann 2014; Power, Ali and Lebdušková 2019). While some scholars argue that metaphors in economic texts are merely used for illustration or decoration without any ‘central purpose’ or as ‘a central organizing device’ across all languages (Henderson, 1986, p. 110-111), others contend that metaphors serve as a means to ‘explore specific economic problems’ and extend ‘the domain of economic ideas’ (Smirnova and Shustova, 2018, p. 270). Recent analysis by Smirnova and Shustova on metaphorical meanings of denominal verbs in a dataset comprising 621,000-word corpus

of articles from *Financial Times* suggests that metaphors not only facilitate comprehension of abstract concepts but also ‘evaluate information’ while promoting ‘specific worldviews’ within the business press (2018, p. 280-281). Ng (2018, p. 220) examined the presence of metaphors in economic discourse and highlighted that dominant and recurring metaphorical patterns conceptualize and normalize societal perceptions towards specific groups while negative metaphors serve to rationalize discriminatory practices against them. Additionally, metaphorical concepts have the potential to evoke emotional responses such as fear. For example, previous studies have found when a country was metaphorically depicted as *a sick body* (Power, 2019, p. 116; Bickes, Otten, and Weymann 2014) in economic discourse, it potentially evokes fear of disease or contagion (Arrese, 2016, p. 146). Similarly, when the economy is figuratively portrayed as ‘moving forward without control toward the cliff’, employing the ‘fiscal cliff’ metaphor can elicit concerns about ‘immediate’ and substantial ‘danger’ (Power, 2019, p. 220). In my study, I will also analyze the most prevalent metaphors and prominent metaphor categories in economic news discourse as ‘dominant and recurring patterns’, while considering the potential effects and impacts these metaphors may have.

Charteris-Black (2004, p. 135-137) has classified metaphorical ‘tones’ as either ‘animate/biological’ or ‘inanimate/ mechanical’, which reveal the text producer’s ‘positioning’ in terms of ‘positive or negative’ ideological ‘evaluations’. These metaphors ‘provide evidence for the choice of metaphors that reflect the evaluation conveyed by the financial reporters’ and align with ‘social expectations’ and the level of ‘certainty with which events or knowledge claims are reported’ (Charteris-Black, 2004, p. 135). Notably, the selection between ‘animate/biological or inanimate/mechanical’ metaphors for describing the economy represents an ideological tendency and belief system where ORGANISM metaphors imply an active ‘struggle for existence’ to ‘derive benefits from their environment’ (Charteris-Black, 2004, p. 136, 137). Over time, these ‘biological metaphors were gradually replaced by machine-based metaphors’ as ‘industrialization progressed and institutions’ like ‘private and joint-stock banks’ were conceptualized as machines ensuring ‘smooth currency circulation within new industrial conditions’ (Charteris-Black, 2004, p. 136). In financial reporting, ‘different types of evaluations’ are implied through conceptual metaphors such as THE ECONOMY IS AN ORGANISM and THE ECONOMY IS A MACHINE (Charteris-Black, 2004, p. 249). ‘Animate metaphor systems’ emphasize ‘predictability in economic processes’ while ‘inanimate metaphor systems highlight their unpredictability’ (Charteris-Black, 2004, p. 249). As mentioned in 2.2.1, ORAGANISM metaphors reveal financial reporters positioning themselves as inside

‘expert analysts’ (Charteris-Black, 2004, p. 136) who can predict economic outcomes whereas MECHANICAL metaphors suggest uncertainty about future economic developments thus indicating a more distanced stance. This study will discuss how variations in metaphor tones expressed through positive/negative evaluations based on van Dijk (2006)’s bipolar ‘positive Us/ negative Them’ image management (mentioned in 2.2.1), and the animate/biological versus inanimate/mechanical distinctions contribute to determining levels of determinism as pointed in Section 1.4.

In addition, several scholars have adopted corpus approaches that combine CMA in their linguistic investigations of economic metaphors in news discourse (e.g., Charteris-Black 2004; Koller 2005; López and Llopis 2010; Smirnova and Shustova 2018). For instance, Koller (2005, p. 200) analyzed a corpus of over 160,000 business magazine texts to demonstrate that ‘the discourse is structured around a conceptual metaphor of evolutionary struggle’, employing metaphorical expressions such as ‘*survive, survival and gobbled up* [by a company]’, which link the state of the economy to matters of vital importance and life or death. Among various renowned economic media outlets such as *Business Week*, *Financial Times* and *Fortune*, *The Economist* serve as a significant source for language data analysis by researchers such as Charteris-Black (2004) and Bickes *et al.* (2014). Charteris-Black (2004, p. 39, 41, 42) integrated corpus linguistics with cognitive linguistics within the field of CDA and argued that metaphors’ rhetorical and ideological basis lies in their ‘important persuasive role in evoking strong emotional responses’, with the ‘rhetorical and ideological motivation’ derived from corpus evidence rather than analysts’ intuition. It is through ‘the availability of corpora’ that we can ‘identify typical metaphorical uses’ while providing ‘explanations and interpretations’ based on this foundation. Findings from their metaphor studies on *The Economist* will be compared with the data presented in the analytical chapters of my research.

Qualitative analysis alone may not suffice to effectively uncover the portrayal of a country’s economy through metaphors. Corpora can provide valuable ‘insights into the conventional metaphors and the cognitive characteristics’ of their domains (Charteris-Black, 2004, p. 34). The most effective approach for identifying conventional metaphors is analyzing through the corpus of language, which involves examining their frequency of occurrence (Charteris-Black, 2004, p. 19). This study combines the corpus approach with CMT to analyze news articles from *The Economist* that focus on the American and Chinese economies. Its aim is to investigate whether different attitudes exist towards these two countries with distinct cultural backgrounds—one being Western and the other Eastern.

Moreover, Cognitive Linguistics, like CDA, is not a single discipline (Hart, 2011, p. 172), and merely focusing on metaphors is not the only way of critical discourse studying through which opaque ideological patterns can be detected. Hart emphasizes the potential for CDA to expand beyond Conceptual Metaphor Theory by incorporating Cognitive Linguistics to reveal ‘various ideological dimensions of text and conceptualization’ that extend beyond metaphor alone (2011, p.172). He directs CL-CDA researchers’ attention towards several ‘construal operations’ and discursive strategies that can be integrated into the analytical categories addressed in CDA to provide a valuable theoretical framework (Hart, 2011, p. 190), such as profiling/backgrounding, categorization and scalar adjustment (Hart, 2011, p. 171-192). In his study on immigration discourse in print news media using CDA theories, he applies these three strategies to illustrate how ideologically significant operations from Cognitive Linguistics can be effectively incorporated into critical discourse research. Ng also suggests exploring ‘metaphor in other modes’ (2018, p. 225), while Steen (2008, 2011) and Ng and Koller (2013) discuss ‘three-dimensional model of metaphor’ which includes ‘linguistic, conceptual and communicative dimensions’ (Ng, 2018, p. 220). These three dimensions classify metaphors based on their linguistic structure as regular metaphors, similes or analogies, and differentiate between deliberate and non-deliberate metaphors by distinguishing novel from conventional ones. The utilization of mixed modes as triangulation approaches, which involve the implementation of multidisciplinary methods to mutually reinforce each other, holds significant implications for future advancements in CMA (Zhang and Yang, 2019, p. 1). Numerous ways exist for classifying cognitive construal operations; among them, Hart (2010, p. 26) highlights Croft and Cruse’s (2004, p. 46) classification, which encompasses judgement/ comparison processes involving categorization and metaphor. In my research, I will employ corpus linguistic methods in conjunction with the cognitive theory of categorization to identify and elucidate metaphors within economic news discourse, aiming to provide a ‘more comprehensive insights of concepts constructed through discourse’ (Ng, 2018, p. 225).

2.4.2 CDA Studies on Economic Crises

Fairclough highlights the significance of crisis as a focal point for discourse analysis research, stating that ‘CDA can contribute’ to critical examination of ‘financial and economic crises’ (Fairclough, 2010, p. 5, 26). During times of global financial crisis characterized by turbulence, media outlets such as news reports shape our beliefs about the world we live in (Charteris-Black, 2004, p. xiii). Fairclough suggested that analyzing ‘explanations’ and ‘attributions of blame’ for the crisis, ‘justifications’ and

‘legitimizations’ of specific actions and policies, as well as ‘value claims and assumptions’ within ‘explanations, justifications, and legitimizations’ can serve as ‘points of entry’ for CDA (Fairclough, 2010, p. 5-6).

CDA has a long history of crisis analysis. Galtung and Ruge (1965, p. 91) conducted research on news data from the Congo and Cuba crises in July 1960, as well as the Cyprus crisis in March-April 1964, which occurred over four decades ago. Recent studies have also extensively examined economic crises. Some of these studies focus on language data associated with the period or immediate aftermath of ‘the 2008-2009 financial crisis’ (Ruggiero *et al.*, 2015, p. 120, 122) which is also the data source of this research. For example, Hirsto (2011, p. 57-58) analyzed everyday stock market discourses in four Norwegian newspapers following the 2008 subprime financial crisis to illustrate power is represented through metaphors such as describing the stock market as a running machine that needs to keep moving smoothly using mechanistic expressions like *new record* and *brisk rise* (Hirsto, 2011, p. 68). However, emotional factors among customers described as *laden* may hinder smooth movement by influencing their investment decisions. Consequently, rising prices are ideologically portrayed positively while falling prices are depicted negatively; investors’ emotions are thus dismissed as burdens preventing smooth operation, and customers bear full responsibility ‘for their inadequate financial choices’ (Hirsto, 2011, p. 73). Ruggiero *et al.* (2015) reveals how economics language functions as a disciplinary and regulatory power and plays a role in ‘normalizing discourse’ through their CDA of ‘economic and social claims about decent work’ shaped by ‘policy agendas’ from ‘world organizations like World Bank’. For instance, a powerful *cliff* metaphor was employed in global labor policy to describe protecting workers against the power of employers and market fluctuations. People might take for granted that it is impossible to offer vulnerable workers with decent work and health insurance just like *climbing over* an insurmountable *cliff* (Ruggiero *et al.*, 2015, p. 125).

Power *et al.* (2019, p. 22) conducted a study on economic news articles during ‘the global aftermath of the US economic downturn that spread worldwide’ following the 2008 global financial crisis. They employed corpus tools and manual analysis to examine how the economic crisis was metaphorically portrayed, focusing on the keyword ‘crisi’ in *Il Sole 24 Ore* (Italian edition) and ‘crisis’ in *The Financial Times* (London edition). Their findings revealed a predominantly ‘negative’ framing of the global financial crisis with pessimistic representations, aligning with ‘general findings’ in previous research ‘on economics language’ (Power *et al.*, 2019, p. 230-231). Metaphors such as ‘inescapable CONTAINER’, physical INJURY, and NATURAL DISASTER were identified across

both media outlets. Koller and Farrelly's (2010) investigation into economic metaphors and keywords in British publications *The Financial Times* and *The Economist* before, during, and after the 2008 global financial crisis demonstrated a shift from an emphasis on economy to politics as the crisis unfolded (Jaworska, 2018, p. 14).

Bickes, Otten, and Weymann (2014, p. 440) conducted a comparative analysis of metaphorical structures in *SPIEGEL*, *TIME* and *The Economist* in 2012 during the escalation of the Euro crisis (2010), which had extended to involve Greece and other countries suffering from economic stagnation, high debt levels, and unemployment (Bickes *et al.*, 2014, p. 424). Their findings revealed that the metaphors employed by press outlets from different countries reflect distinct attitudes and positions towards specific European economies. In the German press *SPIEGEL*, there is an inclination to exploit readers' 'fears of a potential Eurozone breakdown' as a means to 'justify Merkel's political actions' and portray 'Germany and its political leaders' as heroic rescuers while deflecting 'blame for the crisis away' from the country. Conversely, American *TIME* employs *GAME* metaphors to adopt an outsider 'perspective' with some detachment; however, *WAR* metaphors expose belligerent tactics within American political interactions rather than 'acts of solidarity'. *The Economist* utilizes threatening metaphors such as *FIRE*, *TIDAL WAVES*, *EARTHQUAKES*, *DISEASE* and *DOWNWARD MOVEMENT* (Bickes *et al.*, 2014, p. 429) to assign blame for the economic crisis and predict imminent disintegration of the Eurozone along with skepticism regarding its future prospects.

In addition to emphasizing the concepts of 'stance' and 'distance', Bickes *et al.*'s (2014) study demonstrated how metaphor usage reflects an 'ideological perspective in metaphor choices and descriptions' aimed at promoting one viewpoint 'over another' (Hart, 2014, p. 2). For example, the discussion centered on portraying countries as either the 'trigger' or 'offenders/victims' of the crisis or depicting them as 'heroic' figures or the ones of sympathy within the context of the financial crisis (Bickes *et al.*, 2014, p. 424, 440). Metaphors serve as models that offer insights into ideological preferences regarding countries and economic entities assuming distinct roles in discourse (Hart, 2014, p. 2-4). The different roles played by countries or economic entities along with associated attributes contribute to shaping their metaphorical images. Furthermore, the discussion also encompassed countries' economic prospects and outlooks. As Charteris-Black (2004, p.138) asserts, 'tracing metaphor use in financial reporting' that aids in identifying concealed 'beliefs, perspectives, and outlooks' will enable a critical evaluation of language usage for ideological construction. In my study, I will focus on the employment of specific metaphorical narratives (as metaphor 'telling' in Section 1.4) to attribute distinct roles and

identities in portraying the study objects - Chinese and American economies, and their economic outlooks within economic discourse, with the aim of elucidating how these contents are justified through prevalent metaphorical usage. In this regard, CMA provides valuable insights into the underlying ‘ideological nature’ (Charteris-Black, 2004, p. 138).

Arrese (2015) and Arrese and Vara-Miguel (2016) have documented metaphors used to frame the economic and financial crisis that originated in the US and Europe in 2008, drawing on recent research ‘employing economic press reports’ as primary data sources (Arrese and Vara-Miguel, 2016, p. 135). These metaphors include both ‘positive and negative’ metaphors (Arrese and Vara-Miguel, 2016, p. 135-136). The metaphorical source domains identified in these studies are presented in Table 1 below, arranged chronologically based on the year of publication.

Table 1 Published research on metaphorical source domains used in the news about the 2008 economic crisis

Authors and year of publication	Source domains for conceptual metaphors on the 2008 crisis
Lizcano Fernández (2008)	Nature, Disease, Personification, Religious
Orts and Rojo (2009)	Great Chain of Being (Object, Building, Natural force, Supranatural force, Human behavior, Illness, Celebration, Living being, Machine) Path-scheme (Verticality, Source-path-goal, Journey, Container) Event (War, Competitive game, Show business, Medieval tournament)
Cortés de los Ríos (2010)	Natural phenomenon
Rojo and Orts (2010)	Great Chain of Being (Object, Building, Natural force, Supranatural force, Human behavior, Illness, Celebration, Living being, Machine) Path-scheme (Verticality, Source-path-goal, Journey, Container) Event (War, Competitive game, Show business, Medieval tournament)
Silaski and Durovic (2010)	Health (Person – Sick person – Treatment)
Slintáková (2010)	Water related, Body, War, Transport, Medical, Nature, Sports, Colors, Film and Theater, Spirals and bubbles, Furniture, Gastronomy
Steinert (2010)	Illness, Organisms, Revolution
Bounegru and Forceville (2011)	Catastrophe/disaster, Illness/death, Begging, Others
Esager (2011)	Movement, Liquid, Living being, Medical Treatment, Sport, Machine, Building, Journey, Object
Horner (2011)	Body, Machine, Natural disaster, Vehicle, Nuclear disaster
Porto (2012)	Organic, Mechanical
Pühringer and Hirte (2013)	Disease/disaster (nature, military, mechanics), Sensitive actor (anthropomorphism), Party/game
Sodemann (2013)	Ontological (Container, Person, Enemy) Orientational (Horizontal – personal self-movement; Vertical – spiral, abyss) Structural (Storm, Illness, Game, Fire)

Wang <i>et al.</i> (2013)	Living organism, Sick organism
Álvarez-Peralta (2014)	Natural disaster; Biomedical and Cyborg (man machine system)
Blickes <i>et al.</i> (2014)	Disease, Natural disaster, Rescue, Mechanical, Teaching
Joris <i>et al.</i> (2014)	War, Disease, Natural disaster, Construction, Game
O'Mara-Shimek <i>et al.</i> (2015)	Organism, Natural phenomenon, Machine, Standing structure, Container

(Arrese and Vara-Miguel, 2016, p. 137; Arrese, 2015, p. 25)

Despite the editorial and ideological diversity among media sources, Arrese and Vara-Miguel (2016) found that consistent metaphors established ‘shared frames’ for interpreting financial crises across different countries. This indicates a challenge for the media to develop alternative approaches beyond dominant consensus influenced by principles of a free market economy. As a result, the discussion on the crisis has been dominated by elite communication logic, hindering uncovering unique characteristics specific to each country (Arrese & Vara-Miguel, 2016, p. 135, 150, 151; Arrese, 2015, p. 32). Arrese and Vara-Miguel (2016) conducted a cross-country corpus-based study analyzing newspapers from six European countries to explore ‘crisis metaphors’ related to the depiction of the European sovereign debt crisis. They proposed that investigating uniformity in economic metaphors through ‘transnational comparative studies’ is worthwhile and intriguing (Arrese and Vara-Miguel, 2016, p. 151). In my study, I will also examine the consistency and variations of metaphor categories and types within my dataset.

Furthermore, Arrese (2015, p.24) and Arrese and Vara-Miguel (2016, p. 137) examined the twenty published studies from 2008 to 2014 included in Table 1 ‘in the studies of the global crisis began in 2008’ (Arrese, 2015, p. 25) and they summarized six economic metaphorical source categories (DISEASE, NATURAL, MECHANICAL, WAR, SPORT & ENTERTAINMENT and ORGANISM) that ‘emerge as dominant’ (Arrese, 2015, p. 25). In my study, due to the large number of types of metaphors being found in the language data, it is not feasible to analyze all types of metaphors as Skorzynska and Deignan (2006) did, despite using a corpus tool for assistance. Thus, it becomes necessary to categorize metaphor expressions into different metaphor types and categories. As discussed in Section 2.3.3, this study adopted Charteris-Black’s (2004) approach which classifies metaphors into three hierarchical levels. However, it should be noted that Charteris-Black’s (2004) categorization primarily focuses on ‘economy, market, market trading and market changes’ within financial news reporting rather than during economic crisis; whereas Arrese (2015) and Arrese and Vara-Miguel (2016)’s metaphor categorizations examine economic metaphors during the global crisis began in 2008.

Although their research does not specifically address China and America - which are my study objectives, there are more overlapping metaphor types between their works and mine. Henceforth, the metaphors identified in my study for describing Chinese and American economies were grouped into six categories following Arrese (2015) and Arrese and Vara-Miguel (2016)'s metaphor categories and adopted as superordinate categories for my analysis. To put it short, I utilized Arrese (2015) and Arrese and Vara-Miguel (2016)'s categories while adhering to Charteris-Black's (2004) three hierarchical levels. The other two levels include metaphor type as the basic level and metaphor expressions as the subordinate level. Further details regarding these procedures are provided within subsequent analytical chapters. Some of the most pervasive metaphors found in Arrese and Vara-Miguel (2016) are included in Table 2 below.

Table 2 Conceptual metaphor categories, corpus words and metaphorical expressions

Conceptual metaphor categories	Corpus words	Metaphorical expressions
DISEASE	Contagion, collapse, health, injection, disease, fever, medicine, pain, virus, cure, immune, treatment	Fear of contagion, contagion effect, European disease, Greece's disease, social fever, debt fever, economic medicine, medicine of austerity
NATURAL	Storm, fire, abyss, wave, clouds, catastrophe, winter, earthquake, turmoil, hurricane, bubble	Economic storm, financial storm, market fire, firewall around Spain, financial turmoil, on the brink of abyss, housing bubble
MECHANICAL	Domino, tunnel, building, green light, sink, meltdown, harbor, belt, engine, mechanism, parachute, Titanic	Domino effect, light at the end of the tunnel, Greece sinks, financial meltdown, economic belt-tightening, growth engine, financial mechanism
WAR	Firepower, war, attack, battle, bazooka, explosion, bomb, siege, shoot, artillery, hostage, shield	ECB firepower, Greece is a war zone, Euro fights battles, ECB bazooka, financial explosion, European economic artillery, banks hold consumers hostage
SPORT & ENTERTAINMENT	Game, poker, play, party, rally, ball, cards	To be in a chess game, a poker hand, Christmas party by speculation, the ball is in play, cards on the table
ORGANISM	Bailout, haircut, tragedy, bitter, fear, monster, drama, vicious, marriage, divorce, panic, ghost, pigs, hawks	Bailout plan, bailout package, haircut on Greek bonds, Greek tragedy, Teutonic monster, financial drama, vicious circles, Euro panic, inflationary ghosts, the guinea pigs

(Arrese and Vara-Miguel, 2016, p. 155)

The significance of understanding the selection of conceptual metaphors in economic discourse among countries with diverse 'cultural and economic' contexts has been underscored by numerous studies (Arrese and Vara-Miguel, 2016, p. 135-136). As

suggested by Jaworska (2018, p. 14), corpus tools can effectively complement traditional discursive discourse studies. However, most corpus research has predominantly focused on the United States and Europe (Jaworska, 2018, p. 17). Henceforth, it is imperative to conduct research encompassing economies beyond western nations in the field of CDA during financial crisis.

Wang (2015, p. 627) conducted a corpus-based contrastive study on online news reports regarding the global economic crisis, focusing on articles from *China Daily* and *The New York Times* since September 2008. The study utilized data from September 2008 to September 2009 and revealed that Chinese reporters emphasized the contribution of China's stimulus plan and its role in the world's economic recovery, frequently employing words associated with economic *growth*. Conversely, American media exhibited distinct attitudes towards China's economic stimulus plan, placing greater emphasis on the negative effects of the crisis (Wang, 2015, p. 632). However, Wang's (2015) corpus study did not differentiate between metaphorical and non-metaphorical language nor systematically analyze metaphors within news discourse.

While previous studies have predominantly focused on comparing economic news articles on the financial crisis across different countries' media, my research aims to analyze perspectives from a single news source across multiple countries with diverse cultural and social backgrounds. Given that 'English has become the language of global capitalism' and a potent tool for shaping 'people's beliefs' and perspectives, it is increasingly imperative to examine how metaphors used in media reflect 'struggles between' various 'groups in global society' (Charteris-Black, 2004, p. 251). Therefore, this study compares the underlying ideologies in news coverage of Chinese and American economies within one prominent English-language media outlet while considering their distinct cultural contexts. To investigate whether these two nations were portrayed differently through metaphorical descriptions or framed within an 'assumed universal validity' rooted in 'post-industrial Western ideology' (Jaworska, 2018, p. 17), corpus tools supplemented by manual analysis will be utilized. Detailed narratives encompassing metaphor types, categories, and tones will all be thoroughly examined.

2.5 Summary

The current chapter has provided an exposition of key concepts in CDA, such as discourse, ideology, power, and critique, elucidating their intricate connections with language. From a critical perspective, discourse is socially constitutive and conditioned, giving rise to crucial issues pertaining to power and ideology (Weiss and Wodak, 2007, p.

13; Fairclough, 2010, p. 25). CDA investigates the intricate relationship between language, power, and ideologies (Wodak and Meyer, 2001, p. 2). By analyzing linguistic expressions in discourse (specifically metaphorical expressions in this study), this approach unveils the intricate relationship between language and ideology while also revealing how this relationship can be manipulated through linguistic means.

The ideological roles of news media have become the core focus of CDA, with various research approaches contributing to the field, including cognitive and corpus approaches. CL-CDA can effectively reveal underlying power and ideologies in economic news discourse and crisis discourse when combined with manual analysis and corpus tools. Cognitive metaphors may possess an ideological nature through language expressions that involve choices of highlighting or hiding information. Examining the uniformity, frequency, prominence, specific roles and attributes portrayed in narratives, as well as the implied positive/negative evaluations and animate/inanimate associations conveyed by metaphors can unveil potential underlying ideologies and power distance or stance within discourses. It is important to consider the degree of metaphoricity during analysis. Both conventional and recent metaphors hold research values, while metonymy and personification are inherent aspects within cognitive metaphors due to their mapping process. Nevertheless, previous analyses have predominantly employed metaphor theory in CMA without systematically incorporating other cognitive theories. This chapter provides a systematic illustration of the synergy between CDA and cognitive theories involving cognitive metaphor and levels of categorization. Additionally, this study reviews previous research on metaphors in economic news discourse during financial crises using corpus-assisted methods as compensation for gaps in this field. Furthermore, while most studies on CDA focus on Western countries such as the US and European nations during financial crises, there is limited research comparing Eastern cultural economies like China to their Western counterparts like America regarding metaphorical depictions in economic news discourse.

This thesis aims to conduct a systematic analysis of selected samples in economic discourse from *The Economist*, with the objective of examining metaphorical descriptions of the Chinese and American economies and determining whether *The Economist* adopts different perspectives towards China and America. Additionally, building upon previous research in this field, this study seeks to validate that cognitive theories can critically reveal underlying ideologies conveyed through metaphor usage by constructing an effective corpus-based-cognitive model. In summary, this study endeavors to address the three research questions raised in section 1.4:

- RQ1: What are the most frequent metaphors used to describe the Chinese and American economies in *The Economist* between 2010 –2011?
- RQ2: Are there any differences between the way the Chinese and American economies are metaphorically depicted?
- RQ3: If there are differences what do these indicate about the ideological position of *The Economist* towards these countries?

Therefore, in my study, I will employ a tripartite model encompassing construal operations of metaphor and categorization in cognitive linguistics, along with the corpus-assisted method for CDA, to unveil the metaphorical representations of Chinese and American economies as well as the underlying attitudes towards these two countries from *The Economist* during the globally influential subprime mortgage crisis that occurred after 2008 - a financial crisis deemed ‘more severe and unpredictable than any in our lifetime’ (Wang, 2015, p. 627). This investigation aims to examine the most frequently employed metaphors used to depict both economies and determine whether they are portrayed similarly or differently. Furthermore, if any disparities exist, this research seeks to identify these differences and discuss their potential implications regarding ideological stances towards these two nations within economic discourse. Detailed methodologies, analyses, and conclusions will be presented in subsequent chapters.

Chapter 3 Data and Methodology

3.1 Introduction

This part provides an introduction to the data source for this research, namely *The Economist*. It explains how linguistic data was collected and selected, outlines the research methods employed in this thesis, and describes the specific analytical processes used. This study utilized a combination of quantitative and qualitative methods. Quantitative methods involving statistics and corpora were utilized to determine metaphor frequencies/numbers within the selected linguistic data, while qualitative methods were applied for detailed critical metaphor analysis. Section 3.2 elaborates on the data source used in this research. Sections 3.3 and 3.4 further elaborate on the methodology adopted in this thesis, including the integration of quantitative and qualitative research approaches, as well as the process of metaphor identification and coding, along with building news discourse and metaphor corpora using the selected data. The two main methodological features of this research could be summarized as follows:

i. Corpus-based analysis:

It has been frequently argued that cognitive metaphor studies, following the approach of Lakoff and Johnson, often ‘rely on idealized cases’ that are ‘disconnected from the context of actual use in natural discourse’ (Quinn, 1991, p. 91). However, it is crucial for metaphorical data to be derived from authentic texts and discourses rather than being fabricated solely for research purposes. Therefore, this thesis constructed a small corpus and utilized the software AntConc to identify and quantify metaphorical expressions in economic news articles. This choice was made due to its effectiveness and comprehensiveness in calculating numbers and frequencies of metaphors within authentic economic discourse compared to manual accounting methods. The specific reasons for selecting this corpus tool over other computer-assisted corpus software such as N-Vivo, WordSmith Tools, and BNC were outlined in Section 3.4.3.

ii. Combination of quantitative analysis and qualitative analysis:

Two research methodology questions were addressed to achieve the objective of this study: 1) how to locate metaphors within a substantial volume of economic news, and 2) what criteria should be applied for metaphor identification. Consequently, this research employed a combination of quantitative and qualitative methods. Initially, following the way of Charteris-Black (2004), Arrese (2015), Arrese and Vara-Miguel (2016) as well as Bickes *et al.* (2014), manual qualitative research was adopted. Subsequently, quantitative analysis primarily involved integrating and processing metaphorical data through corpus

analysis and computer-aided tools. A detailed account of the analytical process utilizing mixed quantitative and qualitative metaphors is provided in Section 3.3.3. To analyze the constructed corpus in this thesis, the computer concordance software ‘AntConc 3.5.9 (Windows) (Anthony 2020)’ was utilized. Furthermore, determining what could be qualified as metaphors required qualitative analysis employing the Metaphor Identification Procedure (MIP) along with comparison to Lakoff’s List (1991) and previous relevant research conducted by other scholars. Further details about MIP and Lakoff’s List (1991) are presented in Section 3.4.

3.2 Data Source – *The Economist*

This section presents the data source of this thesis derived from *The Economist*, encompassing its extensive readership and influence, language style, assertions and tentative perspectives, as well as its distinct focus on China and America. It also explains reasons behind selecting online news for analysis instead of print news, and the collection and selection of economic news discourse for this research.

3.2.1 Introduction of *The Economist*

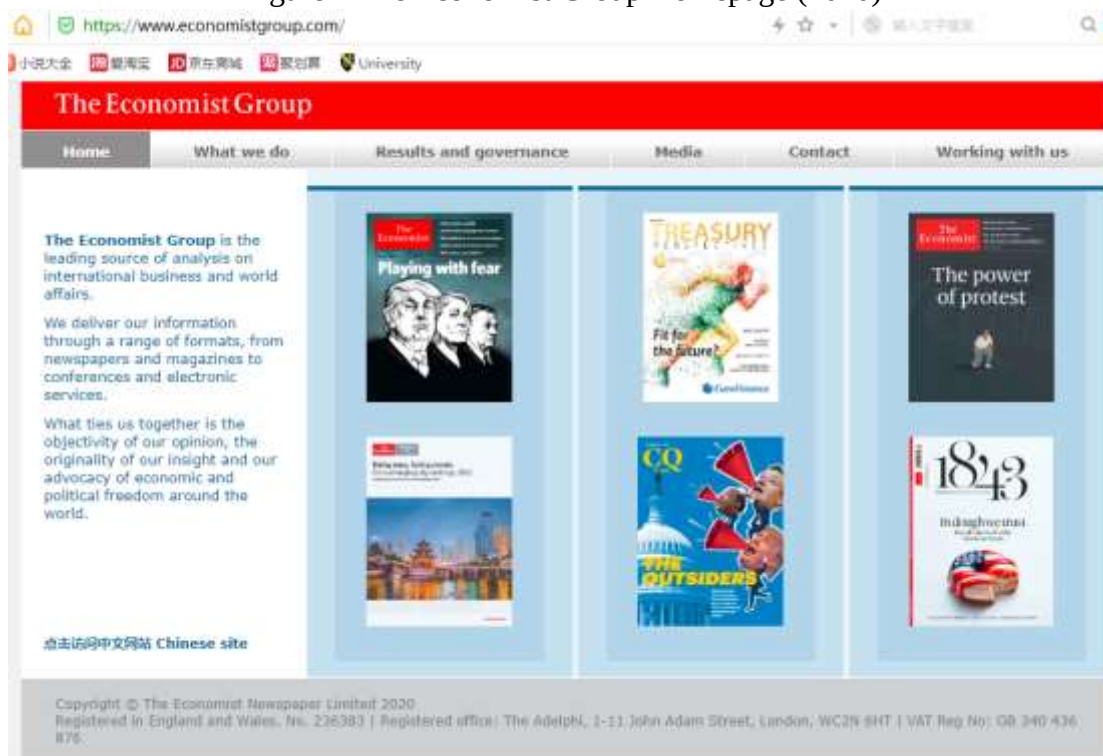
The data source of this research was from *The Economist*, a weekly newspaper that has been in circulation for nearly 180 years since its launch in London in 1843. According to the ‘consolidated accounts of the company (The Economist Newspaper Limited) and its subsidiary undertakings (the Group/ The Economist Group)’, it operates primarily in Britain but also extends its business presence to Europe, North America, Asia Pacific, the Middle East, and Africa (The Economist Group, 2010, p. 34). Renowned as a ‘premier source for analyzing global business and current affairs’ since 1946, *The Economist* aims to provide valuable ‘insights and analysis’ to enable ‘customers’ to ‘stay ahead of competition, make informed decisions’, and tackle ‘daily industry challenges’ effectively (The Economist Group, 2020, p. 18). Collaborating with ‘businesses, governments, international institutions’ and ‘policymakers’, the Economist Group serves ‘decision-makers’ not only within ‘businesses’ but also ‘beyond’ them (see <https://www.economistgroup.com/businesses>). These factors collectively indicated that it enjoyed widespread readership among individuals involved in making influential economic decisions (Charteris-Black, 2004, p. 139).

According to the National Readership Survey, *The Economist* has ‘surpassed half a million readers in the UK’ (The Economist Group, 2010, p. 11). However, expanding its

British readership is not the sole objective of *The Economist*; it has global readers and wields significant influence across various important domains. As indicated in Sections 1.2 and 2.2.3, it enjoys a worldwide circulation exceeding 1.2 million subscribers with North America being its largest market (see <https://www.economistgroup.com/businesses> and <https://www.economistgroup.com/about-us>). The language employed by *The Economist* is characterized by simplicity yet persuasiveness as it pursues for ‘economy of expression’ to save readers’ time (Somaiya, 2015, p. 7). Through concise prose enriched with rhetorical devices like metaphors (Somaiya, 2015, p. 3; Crook 2005), this publication seizes audiences’ attention effectively. Consequently, *The Economist* serves as an exemplar of ‘financial reporting on economic affairs’ (Charteris-Black, 2004, p. 139), making systematic analysis of metaphors within such a globally renowned and influential news media highly meaningful.

The Economist claims on its website to possess trustworthiness and ‘loyal to facts’, while maintaining ‘independent of commercial, political, and proprietorial influences’ (see <https://www.economistgroup.com/about-us>). As depicted in Figure 4, the homepage screenshot illustrates that The Economist Group places significant emphasis on its ‘insightful’ ideas and analyses, particularly highlighting the ‘originality, objectivity, and freedom’ of its opinions presented in newspapers as well as their leading ‘influence on’ international ‘economic events’ (Charteris-Black, 2004, p. 139).

Figure 4 The Economist Group Homepage (2020)



Since its inception, *The Economist* has been widely read among ‘influential circles’ (Iber, 2019, p. 9). Thus ideas, perspectives, knowledge or opinions shared by the ‘dominant’ economic ‘groups’ through *The Economist* may exert both positive and negative ideological influences on ‘their group attitudes, knowledge and opinions’ (van Dijk, 2006, p. 729). According to Zevin (2019), ‘*The Economist* expands the power of finance itself’ and potentially present ‘news from an Anglo-Saxon viewpoint’. ‘Unlike most magazines’ that emphasize individual authors with frequent bylines, *The Economist* relies ‘instead on a strong institutional voice and dry wit’ (Zevin, 2019, p. 6). ‘It has no bylines’ in news reports (Somaiya, 2015, p. 7; <https://www.economistgroup.com/about-us>). Iber argues that ‘markets’ should be seen as ‘tools’ rather than ‘masters’ while also suggesting that “as the great barometer of capitalist thinking”, *The Economist* ‘needs self-criticism’ (Iber, 2019, p. 18). News articles in *The Economist* may exhibit a relatively favorable attitude towards developed countries and elites or wealthy social groups but adopt more critical views towards societies in development. However, this tendency is not absolute due to changes in the global economy. Therefore, this research investigated whether news articles published in *The Economist* were objective, free from local or national ideological constraints, and presented from an international media perspective as claimed or contain hidden partial attitudes towards economies with different social, cultural, and economic backgrounds.

The Economist places particular emphasis on the United States and China, as evidenced by its establishment of a ‘dedicated section’ for ‘the United States in 1942 and a China section in 2012’ (see <https://www.economistgroup.com/about-us>). The publication pays close attention to its American readership, introducing an American section subsequent to its original publication in Britain. Notably, from 2009 to 2019, approximately half of *The Economist*’s circulation was sold in North America, despite being priced as ‘the most expensive weekly’ publication ‘in the US’ (Iber, 2019, p. 6). Recognizing ‘significant’ growth ‘opportunities’ since 2009, particularly within ‘China and India’, The Economist Group identified assisting Western companies’ understanding of Asia and facilitating Asian companies’ expansion beyond domestic boundaries as sources of revenue growth for ‘2009-10 and beyond’ (The Economist Group, 2009, p. 7). This period coincides with the immediate aftermath of the mortgage crisis and aligns with the timeframe for linguistic data selected in my study. In their annual report for 2011, the Group acknowledged that many Asian economies had demonstrated remarkable resilience during the global financial crisis (The Economist Group, 2011, p. 8). Furthermore, in

recognition of ‘China’s emergence as a global power’, the Group inaugurated a dedicated China section aimed at promoting trade in 2012 - seven decades after establishing their US section back in 1942 (The Economist Group, 2012, p. 10). Thus, the period of economic crisis witnessed a notable shift in *The Economist*’s focus on China, leading to the inclusion of three dedicated country columns for the UK, US, and China alongside continental sections. As such, apart from its founding country of Britain, *The Economist* places special emphasis on America and China within its coverage. Therefore, this study aims to examine how these two countries are portrayed in *The Economist* given their distinctive attention.

China, as a socialist country, was previously comparatively less developed in terms of its economy. However, as mentioned in section 1.2, during the immediate aftermath of the American subprime mortgage crisis in 2010, China’s economy surpassed Japan’s to become the world’s second-largest economy next to America (see <https://www.economist.com/graphic-detail/2010/08/16/hello-america>). This marked China’s emergence as a new powerful player. Amidst global struggles with post-crisis economic setbacks and social issues faced by numerous countries at that time, China’s exceptional economic progress appeared surprising. It was imperative to investigate at the time when China transformed its international identity into that of a rising economic power, how both economies - China and the US - were portrayed in the realm of economic news media. Furthermore, it was worth exploring whether *The Economist* holds different attitudes towards these two nations or if it genuinely reported facts objectively as claimed.

The Economist provides news articles in both print and digital formats. According to Fetzer (2014, p. 365), traditional ‘forms of media discourse such as newspapers, magazines, journals and pamphlets’ are closely intertwined ‘with the invention of the printing press’ in the mid-15th century. With the advent of the internet and digitalization, mass media has undergone significant development. Instant electronic data transmission enables readers to access up-to-date news stories from around the world through various online editions that cover a range of topics including politics, economics, science, sports and entertainment (O’Halloran, 2014, p. 239; Fetzer, 2014, p. 365).

Print news organizes ‘different content spatially and with labels’, while online news utilizes ‘tabs’ (Bednarek & Caple, 2012, p. 104), making it easily readable and searchable through keywords in headlines or content. By simply clicking the mouse, readers can effortlessly search for news published at various times. Therefore, the emergence of ‘e-paper’, a hybrid medium between print and online newspaper (Bucher, 2005), not only equals the value of print news but also surpasses it by embracing new trends. Thus e-news has a larger readership base and potentially holds more influence in shaping power

dynamics and ideologies. Moreover, compared to print news, e-newspaper articles offer greater convenience for researchers to gather linguistic data. For instance, in my analysis, I could instantly collect all topic-related news articles by typing key topic words (as illustrated in Section 3.2.4) into the website without having to flip through heavy paper pages repeatedly. Language data within e-news texts were directly copied and collected to build an e-corpus or analyzed using corpus tools without manually inputting language expressions one by one into electronic documents. In contrast, manual searching for data in printed news often leads to incomplete results and is time-consuming and inconvenient when constructing a linguistic corpus. Henceforth, this thesis investigated online versions of news due to their wider audience reach as well as the convenience they offered in collecting authentic linguistic data. The online news reports published on Economist.com were adopted as the primary source of data since they included ‘the full editorial content’ from *The Economist*’s print edition (The Economist Group, 2020, p. 11).

3.2.2 Economic News Discourse Collection and Selection

‘Institutional discourse and the language of the media’ (Baxter, 2010, p. 129) is common to many CDA studies. This study chose to analyze language data from economic news media. As already mentioned in the previous section, economic news articles from the e-version of *The Economist* (www.economist.com) were collected during the time from April 2010 to March 2011. This phase was the time when the global financial crisis of 2008 started in America has spread world further. At the same time, however, as already mentioned in 1.2, it was also the time when ‘China’s economy overtakes Japan’s’ and ‘has become the world’s second biggest economy according to data’ (see <https://www.economist.com/leaders/2010/08/19/contest-of-the-century>). Hence from then on, China’s image in the media might become a newly rising economy occurring in the eye of the first world countries. It was significant to see how China was represented and to examine how the US and China were depicted during this period.

The news articles were gathered through the online-searching from the official website of *The Economist* -- www.economist.com. Given that the topic was associated with China, America and the American subprime mortgage crisis, topic index words including ‘American subprime mortgage crisis’, ‘American subprime crisis + China’, ‘China + American subprime crisis’, ‘American credit crisis + China’, ‘American mortgage crisis + China’ and ‘U.S. subprime real estate bubble’ were used in searching required discourse data. ‘Links that appeared duplicated on the sites results’ (Spilioti, 2018) searched through the topic index words were eliminated. The search yielded a total of 122 economic news

articles during the period of 2010.4 - 2011.3 that related to Chinese economy and/or American economy being influenced by the American mortgage crisis. All the collected news articles are originally published on webpage version of *The Economic* as their first publishing source. However, I have undertaken a thorough reading on all the collected 122 economic news articles and found that after the first step of rough search, the news articles were not all close related to the intended topic. For example, given that the American mortgage crisis was also an important element causing the chain of economic crisis in European countries, in the rough search results articles dealing with economic situations caused by European crisis were involved. However, this thesis only aims to select those with the main content of economic situations associated with the American mortgage crisis and disregard those being influence by the European crisis as it was beyond the scope of the present project to examine how European countries were presented. Besides, articles mainly discussing issues such as border dispute of China, global food crisis or economic problems not caused by the American mortgage crisis, but other factors were also involved in the search results, and they were excluded as well. Therefore, twenty economic news articles were further selected after the thorough reading as closely related to the topic of this thesis as discussing economic situations in America and/or China being influenced by the America mortgage crisis directly and indirectly from different perspectives.

The twenty articles included 16235 words all together, with 811.75 words on average on each piece of news. However, not the whole content or every paragraph or sentence of the articles were associated with the issue of American mortgage crisis, especially how China and the USA were depicted in times of the crisis during April 2010 – March 2011, so the manual check of the whole content of the news was needed. Paragraphs, sentences or content that were not connected with the issue in the twenty articles were crossed out. For instance, news content reporting economic situations of countries other than American and China's economies such as India, Germany and Japan during the financial crisis were excluded. Furthermore, long and pure introduction of specific economic theories and principles behind the subprime crisis in the content of the selected news articles were excluded as well given that this research hopes to discuss how American and China's economic situations and conditions were described but not to illustrate how economy operates. And there were few metaphors used in the introduction of these economic theories and principles. Hence the topic related content contains 13917 words, with an average of 695.85 words for each news article. The twenty news articles being selected were illustrated with chronological order in the table below with headlines and relevant and irrelevant focus of central news events in relation with the American subprime crisis in

the content. All these selected articles were about China and/or the US.

Table 3 Publication date, headline, and relevant and irrelevant focus of central news events

No.	Publication date	Headline and involving China or America	Relevant & Irrelevant focus of news events (represented by R and Ir)
1	20100403	Work to be done (China and America)	R: Measures American government taken to solve American economic imbalance due to the subprime crisis Ir: Pure theoretical discussions among economic theorists on solving economical imbalance
2	20100525	The bust's second (America)	R: Performance of the US real estate market since the second quarter of March 2010 after the crisis Ir: US real estate market performance in the first quarter of 2010 after the subprime crisis
3	20100527	Home truths (China and America)	R: China's housing market performance during the post-crisis period Ir: China's housing market situations before the crisis
4	20100610	Socialist workers (China and America)	R: China's labor market at a turning-point due to the crisis
5	20100626	Paradise foreclosed (America)	R: Florida's economic recession since the second quarter of 2010 due to the crisis Ir: Florida's economic situation until the first quarter of 2010
6	20100722	Unnecessary evils (America)	R: America's housing market during the crisis
7	20100812	Joy, pain and double dips (China and America)	R: Fear of renewed recession in America is over-blown during the crisis Ir: European countries economic conditions during the crisis
8	20100827	Inequality and crash (America)	R: Description of the US government and the blame on the companies of Fannie and Freddie in the post-financial crisis Ir: Pure theoretical analysis of the initial cause of the financial crisis
9	20101021	Bling is back (China and America)	R: Surprising recovery in luxury goods during the financial crisis and reasons associated with China and America Ir: Economic situations in European luxury industries and companies
10	20101122	Breakdown ahead (China and America)	R: Car sales down globally and recovery services suspended due to the crisis Ir: Car industry in countries other than America and China
11	20101125	The mortgage parallel (America)	R: The US municipal-bond market after the impact of the subprime crisis Ir: Economists' purely economic analysis of soaring bond yields
12	20101209	Invest then protest (America)	R: American mortgage mess during the crisis
13	20110103	What will 2011 bring? (China and America)	R: American and Chinese economies during the crisis Ir: Economic situations and outlook of world economy and forward-looking questions for readers
14	20110113	Danger ahead (China and America)	R: American and Chinese car industries' economic situations during the economic crisis Ir: European countries' car industries
15	20110218	Central bankers on the catwalk in Paris (China and America)	R: Global imbalances and financial stability caused by American and Chinese economies during the crisis Ir: Economies in countries other than America and China
16	20110224	Congregate, implicate, obfuscate	R: American and Chinese roles in global imbalances during the crisis

		(China and America)	Ir: Description of global economic imbalances and their causes unrelated to the subprime crisis or unrelated to China or America
17	20110224	The Danish armada (China and America)	R: Good times are back for the container-shipping industry during the post-crisis due to China's surged demand for raw materials Ir: Descriptions of Danish shipping industry
18	20110224	Crisis prevention (China and America)	R: Impact of the subprime crisis in the US caused the decline of the dollar which exacerbated food crisis around the world Ir: Other specific causes and solutions of food crisis unrelated to the subprime crisis
19	20110224	Alibaba and the 2,236 thieves (China)	R: Partially influenced by the financial crisis, Chinese company Alibaba's share price fell Ir: Alibaba's own measures to restore its credibility and other information unrelated to the subprime crisis
20	20110310	Alienated (China and America)	R: As American banks clamped down on lending in the subprime crisis, a number of new amateur firms began lending to the unbanked Ir: Access to credit for American people without bank accounts or immigrants before the crisis

All these twenty articles and their topic related content were built into economic news discourse corpus for further metaphor identification in this research (see Section 3.4.4). The selected economic news discourse in the corpus was named following the sequence in Table 3 above as number 1 to 20. Metaphors in these articles associated with Chinese and American economies were marked so as the reader to be able to check what I have done and the criteria used (see Appendix C). Irrelevant content from the news articles were excluded. The specific process of metaphor recognition and coding is described in sections 3.4.2 and 3.4.5.

3.3 Mixed Methods of Qualitative and Quantitative Analyses

The methodologies employed in CDA studies exhibit significant variation due to the research objectives and applied methodologies: both small-scale qualitative case studies and large data corpora are utilized (Weiss and Wodak, 2007, p. 12). It is important to note that there is 'no single research study' that 'can be considered prototypical of CDA' (Baxter, 2010, p. 129). Qualitative studies serve as valuable 'exploratory' tools for comprehending 'complexity', addressing 'why' questions, broadening our 'understanding', and facilitating 'longitudinal research'. However, they have limitations such as small sample sizes, potential researcher bias, 'lack of methodological rigor', as well as being time-consuming and labor-intensive processes (Dörnyei, 2007, p. 39; 41-42). Conversely, in quantitative studies, the ability to make 'comparisons among relatively large numbers of entities' exists (Rasinger, 2010, p. 52), and 'standardized procedures' allow for the assessment of 'objective reality' (Dörnyei, 2007, p. 34). However, the quantitative methods

lack the capacity for exploration required to uncover underlying reasons behind the ‘examined phenomenon’ (Dörnyei, 2007, p. 35).

The news articles for this study were selected from the internet using index words associated with the research topic to ensure a diverse range of data and avoid limiting the corpus size. Following Tognini-Bonelli’s (2001) recommendation of constructing corpora consisting of ‘whole documents’ rather than fragmented sentences or phrases, I chose entire articles related to the topic as an initial step. This approach allowed for a broader ‘range of linguistic studies’ and prevented the construction of corpora with fragmented languages ‘since linguistic patterns’ are not ‘evenly’ distributed ‘throughout a text’ (Tognini-Bonelli 2001; Chow, 2010, p. 156). Given that qualitative and quantitative methods each possess distinct advantages and limitations, the dichotomy between these two approaches in social science research ‘has become less rigid’ over the past two decades. The increasing utilization of ‘mixed methods methodologies and triangulation approaches’ (employing multiple methods to mutually reinforce each other) has led to a growing trend of simultaneously employing both ‘qualitative and quantitative methods’ (Rasinger, 2010, p. 50; Zhang 2019). This section aims to elucidate the individual merits and constraints of qualitative and quantitative studies alone (Sections 3.3.1 and 3.3.2), followed by an exploration of the combined employment of quantitative and qualitative methods employed in this study (Section 3.3.3).

3.3.1 Advantages and Limitations of Qualitative Studies

Qualitative research focuses on the analysis of structures, patterns, and the essence of phenomena (Rasinger, 2010, p. 52). It emerged as a paradigmatic shift in response to the dominance of quantitative research in social and linguistic fields during the 1970s (Dörnyei, 2007, p. 30-31), coinciding with the emergence of CDA mentioned earlier in Section 2.2.1. Early proponents of CDA such as Fowler and van Dijk (year) employed qualitative methods primarily for descriptive analyses using Halliday’s Systemic Functional Grammar (Hart, 2010, p. 19). The application of Lakoff and Johnson’s (1980) Conceptual Metaphor Theory has been ‘extensively’ utilized within CMA (Hart, 2010, p. 2) to investigate various discourse types associated with unequal power and ideologies including Cold War, political, public, news media, feminist, and institutional/academic discourses (Chilton 1996; Santa Ana 2002; Driven 2003; Musolff 2004; Begoña Núñez-Perucha 2010; Hart 2010; and Reschi 2019). In relation to metaphors used in economic news analysis through qualitative methods, Hirsto (2011) explored mechanistic and emotional metaphors prevalent in everyday discourses related to stock market investing, to examine investor

power. Luporini (2019) analyzed metaphors used during times of economic crisis, in connection with legitimation and austerity measures. Wallis and Nerlich (2005) investigated disease metaphors employed by UK media while framing the SARS epidemic that occurred in 2003. However, it is often noted by scholars that traditional qualitative linguistic researchers have predominantly relied on their own subjective insights as native speakers, referred as ‘native-speaker introspections’ (Talmy, 2006, p. xii; Sinclair, 1991, p. 39), and tend to place trust in their personal ‘intuitions’ and ‘judgments’ (Laviosa, 2002, p. 60). This involves ‘deriving’ ‘plausible hypotheses about conceptual structure’ from language patterns based on the ‘knowledge’ and ‘intuition’ of ‘native speakers’ (Hart, 2010, p. 24). The identification of metaphors may be conducted through intuitive and introspective research methods influenced by the researcher’s personal intuition and judgment. Consequently, research conclusions may inevitably possess subjectivity and one-sidedness (Wang, 2017, p. 35). Therefore, this study did not solely rely on pure qualitative methods. In addition, I included a section at the end of this chapter (Section 3.4.7) discussing how I ensured reliability and validity in my research to mitigate potential bias.

3.3.2 Advantages and Limitations of Quantitative Studies

In contrast to qualitative methods, quantitative studies are grounded in the analysis of a substantial volume of natural language texts. Corpus-based quantitative approaches are deemed ‘more objective and scientific’ compared to ‘introspective and intuitive research methods’ (Wang, 2017, p. 35). They serve as robust ‘safeguards’ against researcher ‘biases and idiosyncrasies’ (Dörnyei, 2007, p. 41). Corpus-based research enables systematic analysis of large text corpora, facilitating the discovery of linguistic facts that may have remained undetected previously (Sinclair, 1991, p. 39). This is an achievement beyond the reach of qualitative analysis through reflective or introspective means or even case studies alone. Charteris-Black also contends that analyzing metaphors within a corpus can enhance our understanding of their ‘conceptual level’ and its connection with ‘underlying ideology’ (2004, p. 244), which aligned with the focus on metaphors in this study.

Metaphors are intricate and cannot be solely recognized through mechanical or computer software. The identification of metaphors necessitates human involvement using qualitative methods. However, this study did not solely rely on the traditional approach of identifying metaphors through manual labor, intuition, or reflection. Instead, a corpus-based tool was employed due to the complexity involved in selecting all metaphors and determining their frequencies within the data simultaneously. The completion of this

task within a limited timeframe would have been both time-consuming and practically unfeasible. However, the utilization of modern concordance software greatly improved the efficiency and accuracy of this study, and eliminated manual counting errors. Additionally, quantitative methods were adopted for their scientific objectivity in order to minimize any potential bias arising from the researcher's own positions, perspectives and attitudes. Furthermore, as a non-native speaker, employing corpus tools proved beneficial in identifying metaphors accurately; even native speakers' introspections may lack complete scientific objectivity at times. Lastly, following Sinclair's (1991, p. 39) suggestion that "the initial evidence should always" come from "the observation of language in use", it is preferable to expound and substantiate hypotheses with few or nonfabricated cases or examples. Therefore, it is more appropriate to collect and analyze authentic news articles for their potential opinions and metaphorical features in use rather than assuming how economic news opinions might be expressed. Building a quantitative language corpus is helpful in handling real language data.

Corpus-based/assisted CDA is widely employed by researchers utilizing various tools. Prior to 2001, some DHA researchers have embraced 'corpus-based methodologies' (Reisigl and Wodak, 2001, p. 35. in Hart and Cap, 2011, p. 54) or 'corpus-driven approach' (Deignan 2005, 2008 in Hart and Cap, 2011, p. 55). Fetzer (2014) has compiled clickable headlines, quotes, and background information to investigate keywords through corpus-based research methods (2014, p. 366). Flowerdew (2018, p. 108) utilized WordSmith and AntConc for the analysis of 'frequency of occurrence' indices. In the field of CMA, Sing (2011) established a 'methodological synergy' between CMA and corpus linguistics by employing keyword in context (KWIC) to examine 'metaphorical constructions of European identity' (Hart, 2011, p. 3) in a corpus consisting of reports from *The Guardian*. 'Word formation as a source of metaphoricity' has been explored by several (Smirnova and Shustova, 2018, p. 271).

As mentioned in 2.4.1, Koller (2005) utilized WordSmith to investigate metaphors in business media discourse. The study focused on texts 'published between 1997 and 2000' from four prominent publications - *Business Week*, *The Economist*, *Fortune* and *the Financial Times* - with each contributing approximately a quarter of the corpus (Koller, 2005, p. 207). However, this research was exploratory in nature and did not encompass all metaphors used. Moreover, similar to my own research objectives, Bickes *et al.* (2014) also selected *The Economist* as one of their focal points for studying the metaphorical portrayal of Greece, Spain, and Italy in German and English press. They specifically chose language data from 2012 instead of during the Greek crisis or Greek bashing period in

2010. Similarly, my research concentrates on economic news published between April 2010 and March 2011 which corresponds to the immediate aftermath of the mortgage crisis that occurred during 2008-2009. Considering that by this time the global crisis had already affected China extensively and persisted for an extended duration while simultaneously witnessing China's GDP surpassing Japan's, it would be intriguing to examine potential differences in metaphorical depictions of the crisis and how these portrayals shape perceptions of the involved countries' images. In comparison with previous studies conducted during or immediately after the onset of the crisis, it may be observed whether similar metaphors were employed or not utilized when depicting different economies.

Nevertheless, the quantitative studies recognize metaphors in a mechanic way. Although with extensive data, profound reasons of how and why certain metaphors were used ideologically were not sufficiently revealed. Henceforce, they need to be combined with qualitative discussions and explanations, which is what I did in my analysis.

3.3.3 Combination of Qualitative and Quantitative Methods

According to Wray *et al.* (1998), it is feasible to integrate elements of both qualitative and quantitative approaches, thereby enabling the identification of patterns and features through qualitative work, while determining the frequency of these features through a quantitative approach. Therefore, through mixed methods, not only is the occurrence rate of specific language structures examined but also the reasons behind their usage on specific occasions are explored (Wray *et al.*, p. 96, 2001).

Reflection is a fundamental 'cognitive practice' extensively employed 'in qualitative research' (Mortari, 2015, p. 1). Qualitative methods can be applied to "construct the meaning about practice" (Mortari, 2015, p. 1), facilitating profound analysis and fostering critical and reflective activities that are lacking in quantitative research. In CMA, qualitative analysis plays a pivotal role in addressing intricate problems that cannot be resolved solely through corpus-based analysis, such as identifying metaphors in articles and categorizing them accordingly or exploring the ideological reasons behind their usage. Whilst quantitative analysis provides precise data while modern technological advancements in corpus linguistics enhance accuracy and efficiency when analyzing linguistic expressions (Rhodes and Garrick, 2002, p. 95). Therefore, by employing appropriate design and sequencing strategies, qualitative and quantitative methods can effectively complement each other. This study adopts a mixed methods approach incorporating cognitive theories and corpus linguistics as suggested by Dörnyei (2007) to offer plausible interpretations while 'adding data-driven (rather than speculative) depth to

the analysis' (2007, p. 40).

Both Charteris-Black (2004) and Demmen (2015) have attempted to integrate qualitative methods with quantitative corpus-based approaches in the field of CMA. Charteris-Black's (2004) methodology for metaphor identification consists of two stages: firstly, a 'close reading' of a text sample to identify 'candidate metaphors', followed by a quantitative measurement of metaphorical 'keywords'; secondly, a subsequent 'qualitative phase' involving an analysis of 'corpus contexts' to determine whether each instance of keyword usage is 'metaphoric or literal' (Charteris-Black, 2004, p. 35). His research encompasses various discourse types including *The Economist*, focusing on 'conventional metaphors' (Charteris-Black, 2004, p. 36). Although Charteris-Black employs both qualitative and quantitative methods in his research design, the criteria for metaphor identification were unclear and subjectivity remains an issue. In contrast, Demmen utilizes 'the University Centre for Computer Corpus Research on Language (UCREL) Semantic Analysis System (USAS) tagger in *Wmatrix*' as an alternative to traditional manual analysis techniques to overcome their limitations (2015, p. 209). However, this tool still presents challenges in terms of convenience and efficiency when it comes to metaphor identification due to its heavy reliance on manual tags.

Wang (2017) conducted a corpus-based study on metaphors in travel news from the perspective of the theory of lexical concepts and cognitive models (LCCM Theory). The ultimate objective was to explore appropriate translation strategies for English to Chinese metaphors. In his study, Wang (2017) employed MIP and the corpus tool AntConc for metaphor identification and analysis. Similarly, Chow (2010, p. 154) utilized MIP in a comparative study analyzing metaphors used in economic news articles from Britain and Hong Kong with the assistance of corpora. Inspired by their research, I also adopted a modified model using MIP as a qualitative method and AntConc as a quantitative method to identify, analyze metaphors, and discuss potential underlying ideological reasons behind these metaphorical language expressions.

The detailed analytic process was as follows:

1. Metaphors in the selected economic news articles were identified through manual labor, MIP analysis, comparisons with Lakoff's List (1991) and other relevant research findings, as well as corpus-based analyses. This comprehensive approach involved iterative qualitative and quantitative analysis. Detailed procedures for metaphor identification and coding are further elaborated in Sections 3.4.2 and 3.4.5.

2. All identified metaphorical expressions were carefully examined to ensure their relevance to the topic at hand, specifically describing Chinese and/or American economic

situations influenced by the mortgage crisis during April 2010 to March 2011; any metaphors presenting other countries' economic situations or unrelated economic activities were excluded (details provided in Section 3.4). Furthermore, topic-related metaphors were categorized into different types such as BODY metaphors, JOURNEY metaphors, and WAR metaphors to determine the most frequently used ones. All identified metaphor types are presented in the analytical chapters of Sections 4.2.1 and 5.2.

3. Quantitatively, the occurrence numbers, frequency, and percentage of different types of metaphor expressions regarding different countries (China and America) were calculated and presented in separate statistical tables to examine whether distinct metaphors were employed to describe their respective economies. Additionally, the various metaphor types were categorized and compared with previous studies in the same field as well as with each other. The categorization of metaphors is provided in tables in 4.2.1 and 5.2.1.

4. Qualitatively, prominent examples with high frequency from each type of identified expressions were explicitly illustrated in Sections 4.2.3 and 5.2.3 to unveil how the Chinese and American economies were metaphorically portrayed.

5. The aforementioned quantitative and qualitative data was summarized to compare and analyze the metaphorical descriptions of the Chinese and American economies during 2010-2011, as well as to explore potential underlying attitudes.

3.4 Metaphor Identification, Coding and Corpus building in Economic News Articles

The identification, coding, and corpus construction of metaphors in economic news articles played a crucial role in this research. The methods for recognizing and categorizing metaphors through corpus-based approaches and MIP are explained in section 3.4.2. This design was initially employed by Longben Wang (2017) in his corpus-based study on English Chinese translation of metaphors from English to Chinese in travel news from the perspectives of lexical concepts and cognitive models. I modified his design for metaphor identification process into a refined “6 Cs” model and used it to identify metaphors in economic news for CDA purposes. The model is elaborated in detail in 3.4.1 below. Subsequently, the following section outlines the methodology and steps involved in identifying metaphors. Section 3.4.3 introduces the corpus software I used in my analysis, followed by Sections 3.4.4 – 3.4.6 that explain the economic news corpus building, metaphor coding and how topic-related metaphors were selected to build the metaphor

corpus respectively. Finally, section 3.4.7 addresses potential researcher bias as well as discusses the reliability and validity of this study.

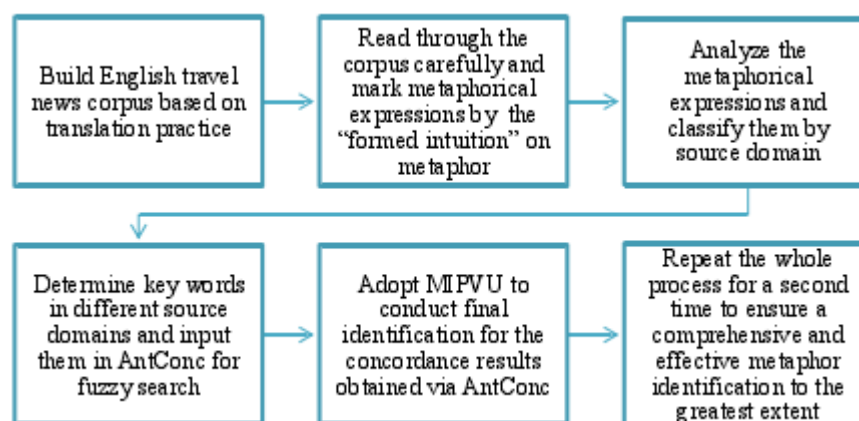
3.4.1 Research Design of Metaphor Identification

In order to identify metaphors in the linguistic data, this study combined quantitative and qualitative methods in reiteration via intuitive analysis, corpus-based analysis and MIP. (The specific content on what MIP is and how it works are further explained in section 3.4.2.). The intuitive analysis was not purely depending on my linguistic intuition but results of comparison with Lakoff's List (1991) to make it more objective. The process includes six steps.

1. Build a small-sized economic news corpus.
2. Read through the linguistic data in the corpus closely and carefully to mark all metaphorical expressions by the researcher's "formed intuition", background reading on metaphor, and comparison with Lakoff's List (1991).
3. Classify the above recognized metaphorical expressions according to their different source domains.
4. Determine key words in accordance with the types and categories of metaphors. Input the key words in AntConc for primary search.
5. Determine whether the concordance results can be counted as metaphors using MIP for each item.
6. Repeat the whole process to maximize the validity of the metaphor identification.

Wang has shown his 'research design of metaphor identification' as follows:

Figure 5 Overall Process of Metaphor Identification in Wang's Study

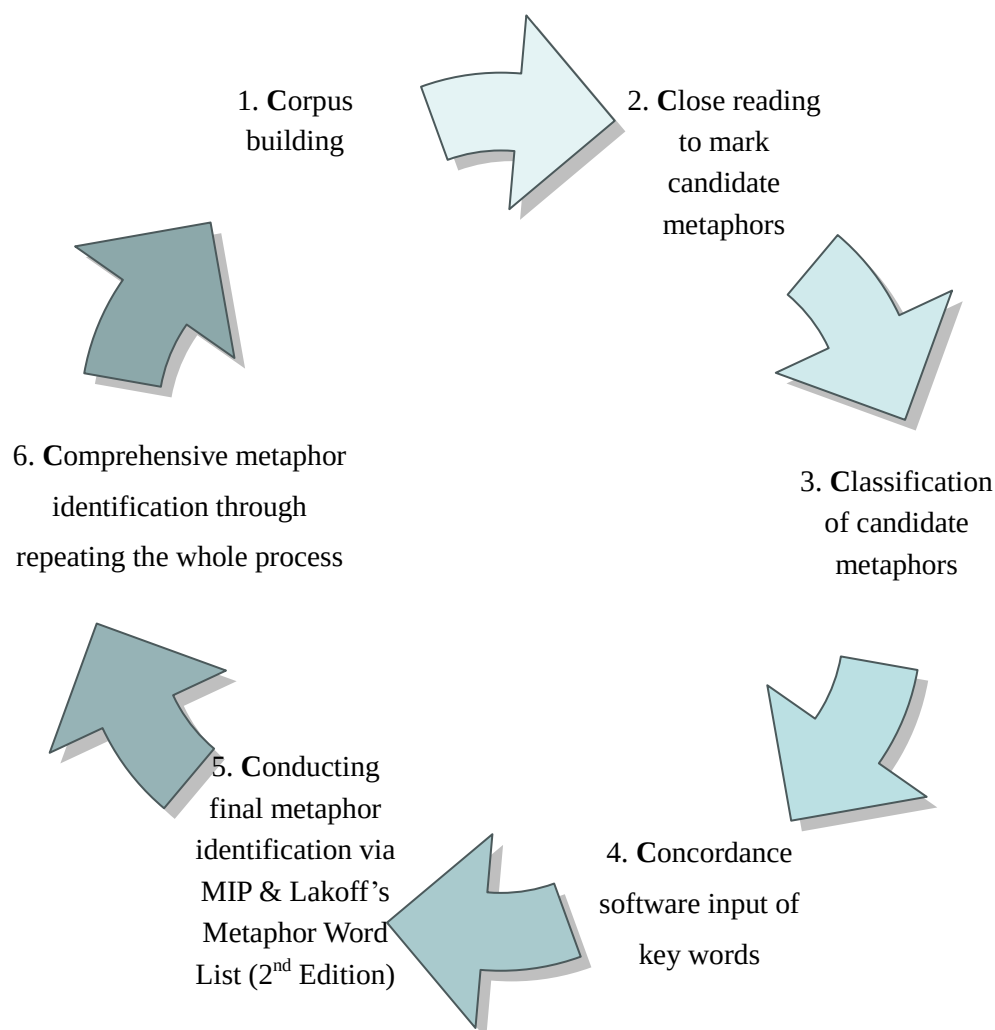


(Wang, 2017, p. 34)

However, I summarized the overall process of metaphor identification as "6 Cs"

Model, which is shown in the figure below.

Figure 6 “6 Cs” Model of the Overall Process of Metaphor Identification in This Study



Compared with Wang’s summary of the overall process of metaphor identification, my “6 Cs” model bear several benefits. Firstly, it was simpler, which may be easier and clearer for readers to understand or even for other similar research to follow. Secondly, in the explanation of the six steps, verbs were used to specify what to do as in Wang’s model. Whilst in my model a noun form was used as the center headword in each step which might be easier to understand and remember what the core of the step was. At the same time, using different forms and parts of speech in language expressions distinguished the model from its interpretation or explanation of the six steps, rather than merely repeating it. Besides, the cyclical process rather than a linear process was highlighted in the figure, and it depicted the practicalities of the research process more accurately. Moreover, this model emphasized necessary qualitative and quantitative recognizing processes instead of stressing on relying on AntConc or MIP. In this case, newly invented software or other

more appropriate metaphor recognition procedures could be adapted to this model. Therefore, the “6 Cs” model was more replicable with a high ‘degree that could be reproduced’ (Bryman, 2012, p. 715) or reused even in other similar studies.

3.4.2 Identifying Metaphors Using MIP

MIP (Metaphor Identification Procedure) was developed by Pragglejaz Group (2007) with the intention to ‘present an explicit and reliable method to identify metaphorically used words in discourse and to provide metaphor scholars with a flexible and applicable analytic tool’ (Pragglejaz Group, 2007, p. 1). ‘The Pragglejaz Group’s procedure MIP focuses on the linguistic analysis of metaphorically used words or lexical units in discourse’ (Steen *et al*, 2010, p. 5). The MIP procedure and explication is as follows:

1. Read the entire text–discourse to establish a general understanding of the meaning.
2. Determine the lexical units in the text–discourse

3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Consider what comes before and after the lexical unit.

(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be

— More concrete; what they evoke is easier to imagine, see, hear, feel, smell, and taste.

— Related to bodily action.

— More precise (as opposed to vague)

— Historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical.

(Pragglejaz Group, 2007, p. 3)

Pragglejaz Group (2007) has used the first sentence of a news article from *The Independent* titled “Sonia Gandhi stakes claim for top job with denunciation of Vajpayee” as an example to demonstrate the application of MIP in four steps. The first step was to read the whole article to grasp the topic and concern of this piece of news. Then the second

step was to identify lexical units in the sentence as the following. Slashes were used between lexical unit boundaries:

/ For / years /, Sonia Gandhi / has / *struggled* / to / convince / Indians / that / she / is / *fit* / to / wear / the / *mantle* / of / the / political / *dynasty* / into / which / she / married /, let alone / to / become / premier /.

(example cited from Pragglejaz Group, 2007, p. 4)

Each lexical unit separated by the slashes was considered in turn from the beginning to the end of the sentence of their ‘contextual meaning’, ‘basic meaning’ and ‘contextual meaning versus basic meaning’ (Pragglejaz Group, 2007, p. 4). The crucial issue among all the four steps was the third step - to compare the basic meaning versus contextual meaning of each word unit in discourse. The comparison result led to the final step of the evaluation that whether the word was metaphorically used. Pragglejaz Group used Yes / No to evaluate each lexical unit. Four lexical units - ‘*struggled*, *fit*, *wear* and *mantle*’ were judged by Pragglejaz Group (2007) as metaphorically used. (These four metaphor words were shown in italics in this research in the example listed above to be explicit but not in italics in the original published paper.)

This research applied MIP to analyze metaphors in economic news reports. For instance, also in the first sentence taken from the first sample news article “Work to be done -- How the government can help things along” selected in the data from *The Economist*, “Until the financial crisis *hit*, America's *mounting* imbalances drew scant attention from presidents.”, the whole piece of news was read through as step 1. Different from step two in the standard MIP, this research did not use slash in the identification of metaphors but marked metaphors with the help of comparing lexical units with Lakoff's List (1991) (to be introduced in next section). Specific ways of metaphor coding are discussed and presented in the first section of next chapter. Although without slashes, the manual labor of metaphor identification process also followed the sequence to consider each lexical unit in turn from the beginning of the sentence. After comparing the contextual meaning versus basic meaning of each lexical unit as the third step, *hit* and *mounting* were identified as metaphorical expressions. The literal meaning of “hit” means ‘to strike’. Here in the context, *hit* indicates economic lose such as resource or money caused by financial crisis. The contextual meaning is not the same as the literal or basic meaning. Besides, checking in Lakoff's List (1991), metaphorical use of *hit* could be found in the List in the sentence “She *hit* them with tremendous one-liners.” (Lakoff, 1991, p. 175), which belongs to examples in the source domain of INJURY. In Lakoff's sentence, “one-liners” in target

domain of HUMOR was compared to be injury. Similarly in the economic news in my data, financial crisis caused injury on American economy. The contextual meaning of “mounting” in the economic news could not ‘be understood by comparison with its basic meaning’ (Pragglejaz Group, 2007, p. 6) either in that it did not indicate real mountains but used the mapping of MORE IS HIGHER/UP which was a subordinate metaphor belong to the source domain of PHYSICAL PROPERTIES (Lakoff, 1991, p. 62). In the final step of MIP, each lexical unit was evaluated by Yes / No. While as the final step in this research, metaphor words were not marked by Yes / No by each word as Pragglejaz Group (2007) did but shown in italics to reveal contrast with nonmetaphorical words to simplify the identification process. Thus, the additional changes to the original steps of Pragglejaz Group (2007)’s design of MIP that are suitable for my research were:

Step 3. + Compare the established contextual meaning with metaphors in Lakoff’s List (1991) and other previous research to double check whether it is a metaphor. And if it is a metaphor, decide its metaphor type from the comparison.

Step 4. + Italicize the metaphorical lexical unit.

Through adding these modifications, metaphors recognized in this research were not identified merely based on my intuition but were more grounded and systematic.

As mentioned in the previous section, the modified MIP procedures were adopted in the step of ‘Conducting final metaphor identification via MIP & Lakoff’s Metaphor Word List (2nd Edition)’ in the ‘6 Cs model of the overall process of metaphor identification’ in this study. After roughly locating metaphors in the large quantities of economic news, the concordance results needed to go through a qualitative analysis to determine whether the key word in each item could be counted as a real metaphor in its context via MIP. Given that some might be mere normal but not metaphorical language expressions, and some might be decontextualized text chunks. Thus ‘by inputting the keywords into the computer concordance software’ in the next loop, ‘the scope of metaphor identification is further narrowed’ (Wang, 2017, p. 34). Based on Wang’s and many other CMA studies there is no comprehensive, reliable and accurate automatic computer tool for identifying linguistic metaphors. Researchers have to identify metaphors through manual procedures based on an individual’s understanding and sensitivity to metaphor (Wang, 2017, p. 51). Deignan (2005, p. 180) argues that ‘metaphor identification will, to some extent at least, always rely on an analyst’s “informed intuition”’. Charteris-Black (2004) also claims that

only the analyst may determine the conventionality of metaphor and eliminate the incongruity, and perceptions of congruity depend on the individual's experience of language.

(Charteris-Black, 2004, p. 37)

Therefore, combining reflective qualitative analysis with computer-assisted quantitative analysis to recognize metaphor in the provided 'extensive context around the candidate metaphor' is a reasonable and more appropriate method, given that 'only this context will sever to determine whether or not there is the semantic tension that justifies classification as metaphor' (Charteris-Black, 2004, p. 37). Finally, I repeated the whole process as mentioned in 3.4.1 to maximize the validity of the metaphor identification.

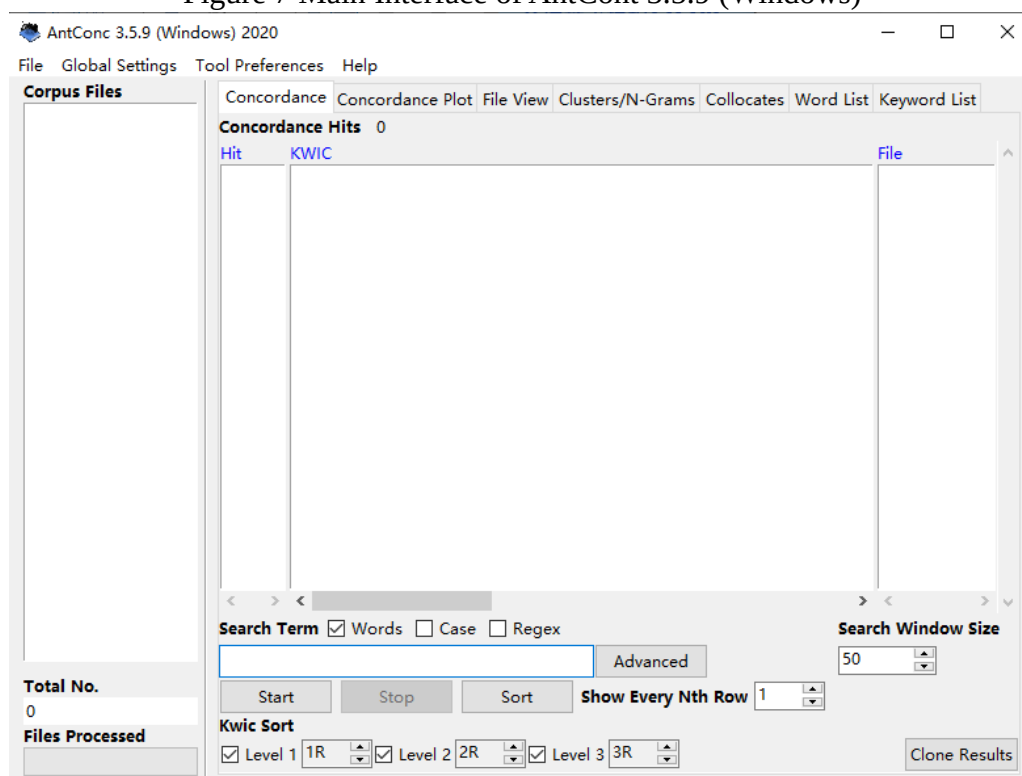
In addition, although I adopted MIP in the identification process of this research, it did not mean it was the only or correct way to identify metaphors, and the identification did not end up simply by using it. Even within the Pragglejaz Group that invented this method, the nine of them 'disagreed over certain metaphorical cases' (Pragglejaz Group, 2007, p. 13). Therefore, in this study, all identified metaphors were checked and compared with Lakoff's List (1991) and examples and results in relevant research in this field. Furthermore, it did not mean that all metaphors identified in my study, although compared with Lakoff's List (1991) and previous findings of others, could be viewed as standard answer to determine the metaphor type a particular metaphorical word or expression belongs to, but rather provide a more grounded way to identify metaphors in context.

3.4.3 Concordance Software Selection and Functions Applied in AntConc

To meet the needs of this study, the concordance software AntConc was used in this research. AntConc is 'a freeware corpus analysis toolkit for concordance and text analysis' (see <http://www.laurenceanthony.net/software/antconc/>). It was developed by Laurence Anthony in School of Science and Engineering, Waseda University, Japan. AntConc could provide users to do linguistic corpus-based or linguistic data-driven study. I have selected AntConc amongst many programs and corpuses including N-Vivo, WordSmith Tools, and BNC because AntConc was comparatively more appropriate to do this research given that this study needed quantitative concordance software which was a typical corpus study program, and it could include or could be added with the linguistic dataset I wanted to analyze. For instance, compared with N-Vivo which was more suitable for qualitative research, AntConc was a more typical corpus-based quantitative program; compared with another typical corpus-based program WordSmith which only contained three main functions - Concord, Key Words and Word List, AntConc included more functions that

could be applied for this research, like Concordance Plot and File View. The extra functions in AntConc could locate words in its original context. Compared with BNC, which was a classic ready-made online corpus, AntConc was more applicable for entering new raw materials. This study applied “AntConc 3.5.9 (Windows) 2020” launched on December 11, 2020, which was the latest version that I could find until the writing of this chapter. A screen capture of the main open interface of this software is shown below.

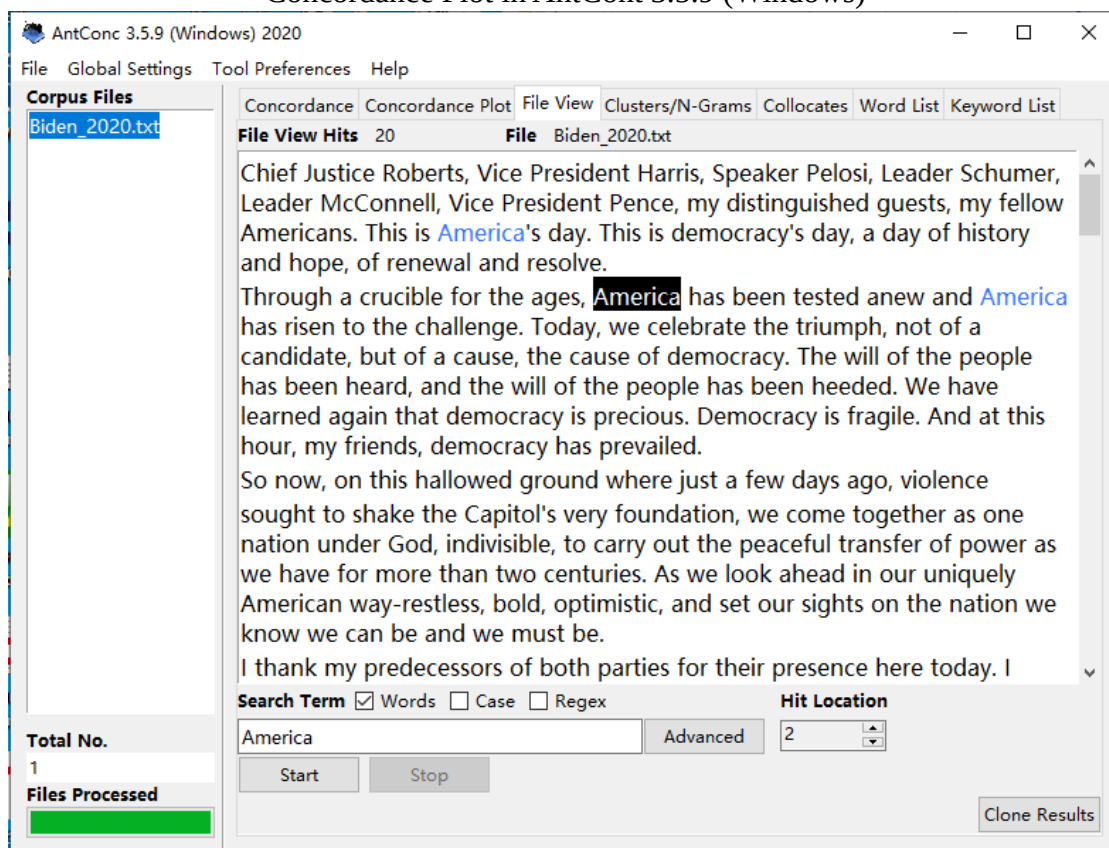
Figure 7 Main Interface of AntConc 3.5.9 (Windows)



(Anthony, 2020)

There were seven tags on the main interface of AntConc 3.5.9 (Windows) 2020 shown in Figure 7 above. Each tag marked one function of the software. Among all the seven functions, Concordance, File View and Clusters/N-Grams were used in my study. After typing in the search term, the results obtained by the Concordance tool were displayed in the workspace under Hit by the occurrence number and under “KWIC” (Key Word in Context) by each item. The search term in each item was highlighted in blue color. Users could click the search term shown in each item to see its original context under the tag File View as shown below.

Figure 8 The Word ‘America’ in its Original Context Searched from the Second Hit in the Concordance Plot in AntCont 3.5.9 (Windows)



(Anthony, 2020)

Besides, Clusters/N-Grams could allow users to search words next to the search term on its left or right side as designed to be searched according to word sequence in its original discourse. In my analysis, the function of Concordance was used to select words and marked metaphors; File View could help to see the original linguistic context of the searched item; and Clusters/N-Grams was used to rank the marked metaphor types from the most to the least. The function of Clusters/N-Grams could also generate clusters results which show the ranking of frequencies. Therefore, rankings of the most frequent metaphor types used in describing Chinese or American economy discussed in the quantitative analytic sections (Sections 4.2.2 and 5.2.2) were generated from using this function. And the frequency results of all metaphor types for Chinese economy and American economy are included in Table 7 in Section 4.2.1 and Table 12 in Section respectively.

3.4.4 Economic News Corpus Building

In order to make a systematic analysis of metaphors in economic news, a small corpus was put together by 20 economic news articles from *The Economist*. Selections of these articles have been explained in detail in previous Section 3.2.4. News headings and

relevant and irrelevant foci associated with this research topic in these news articles have been illustrated in Table 3 in 3.2.4. The twenty news articles were labeled with numbers from 1 to 20 in accordance with the chronological order of their publication dates (see Appendix A). Thus, twenty-word documents were formed with the names of number 1-20. As a reminder, the irrelevant content has been deleted in the twenty news articles, such as economic situations associated with countries other than China or America, or unassociated with the American Mortgage crisis. This meant the economic news discourse corpus built in this research did not necessary contain these whole complete news articles but with partial deletion of some unrelated contents. Hence, an economic news discourse corpus containing 20 pieces of news articles involving about 13917 words with 695.85 words on average for each piece was built. The content describing American and Chinese economies in the selected twenty news articles in the economic news corpus are illustrated bellow. In the table, numerals in the ‘number label of news articles’ column refer the articles being labeled in Corpus I.

Table 4 Distributions of metaphors describing American and Chinese economies

Country	Number label of sample news articles																			
America	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	
China	1	3	4				7	9	10				13	14	15	16	17	18	19	20

In Table 4 above, the number labels in bold were news articles containing metaphors describing both American and Chinese economies. Given that this study compared descriptions of the two countries’ economies, the content was separated into two corpora with each telling one country’s economy. However as can be seen from Table 4 there were 13 news items in the data (shown in bold in the table) contained economic descriptions of both China and the United States. Only six news articles and one purely described a single country’s economy, the US and China respectively. Therefore, it was not possible to divide the economic news corpus into two corpora with one describing American economy and the other describing Chinese economy simply by choosing news articles describing either economy. Therefore, a careful and close reading was employed on all twenty economic discourses in the original economic news corpus to separate the content into two corpora as Topic Corpus A and Topic Corpus C (A stands for America, C stands for China.). Discourses in Topic Corpus A included sentences and contents reporting American economy while Topic Corpus C contained those portraying Chinese economy.

Then metaphorical lexis was identified and coded in the twenty-word documents. Specific metaphor identification and coding procedures are amplified in 3.4.2 and 3.4.5.

The corpus tool AntConc used in this research has been introduced in Section 3.4.3.

3.4.5 Coding Metaphors with Lakoff's Metaphor List

This study used the corpus tool AntConc (introduced in Section 3.4.3 by its functions and applications in my study) which is frequently used in corpus study field in to help in searching and calculating metaphorical corpus words in the analyses. However, given that AntConc cannot automatically identify metaphors or be used to add the coding but only to count the coded metaphors, unlike traditional corpus studies based on statistical calculation of keywords or linguistic collocations as traditional points of entry to search for general informative information in quantitative corpus tools (Baker *et al.*, 2008, p. 295; Jaworska, 2018, p. 16), in this study I coded metaphors manually first so that the corpus tool could recognize the coded metaphors with language markers.

The coding in this research mainly followed Lakoff's List (1991) which is a 'metaphor system of English' and a 'study of conceptual metaphor systems' (see <http://araw.mede.uic.edu/~alansz/metaphor/METAPHORLIST.pdf>). The List (1991) is an 'attempt to compile in one place the results of metaphor research' (Lakoff, 1991, p. 1). It lists metaphors systematically in different levels of categories and is a representative, inclusive and less controversial list of metaphors. Here I used the second draft copy compiled by George Lakoff, Jane Espenson, and Alan Schwartz (1991). The linguistic data in this research was coded with the metaphor name adopted from the List. The metaphor name is the formula illustrating the mapping of metaphors from the source domain to the target domain, as mentioned in Section 2.3.1 'TARGET DOMAIN IS SOURCE DOMAIN'. The formula was called 'metaphor name' (Lakoff *et al.*, 1991, p. 1) in Lakoff's List (1991). For example, in the sentences 'The *bottom* of the economy *dropped out*.' and 'I'm down to my *bottom* dollar.' (Lakoff, 1991, p. 184), the economy was depicted as a container with *bottom* that can *drop out* and the penniless economic situation as with a *bottom* to contain dollar. These sentences were listed under the metaphor name INVESTMENTS ARE CONTAINERS FOR MONEY.

There is also an online version of the metaphor list being designed systematically as Conceptual Metaphor Home Page (Lakoff, 1994; Charteris-Black, 2004, p. xiv) (see <http://www.lang.osaka-u.ac.jp/~sugimoto/MasterMetaphorList/MetaphorHome.html>). The pdf. version and homepage version bear different features. Content in the pdf. document is comprehensive with multiple examples that can help to search and check whether certain words are used metaphorically, while the homepage server is more convenient to search metaphor formula and to decide quickly which metaphor type a metaphor belongs.

Metaphors could be searched from the three indexes on the server's homepage - index by metaphor name, index of source domains and index of target domains. In this research the pdf. version of the List was used to identify metaphor types given that the content was more comprehensive and with detailed examples and the online server was used to double-check the coding due to its convenience in searching source and target domains of metaphors.

Apart from Lakoff's List (1991), other lists of metaphors identified in the field of economic news metaphors were also employed in the analysis, such as in Charteris-Black (2004), Bickes *et al* (2014), Arrese (2015) and Arrese and Vara-Miguel (2016), Gao (2016), Feola & Jaworska (2019). Lakoff's List (1991) is a systemic 'compilation' of metaphors 'taken from published books and papers, student papers at Berkeley and elsewhere, and research seminars' (Lakoff *et al*, 1991, introduction). However, given that the List (1991) was compiled more than thirty years ago, the short brief lists yield from more recent research findings in the similar field or results on relevant specific research issues or in the form of appendices were employed as compensations suited to my research.

All metaphorical lexical expressions in the selected twenty news articles were being coded with their metaphor names, the index word 'metaphorA' or 'metaphorC' and their source domains, as '[METAPHOR NAME metaphorA/C source domain]'. Similar with the naming of Topic Corpus A in 3.4.4, here the marking of the index words did not follow the alphabetical order like metaphorA, B or C. The capitalized letters A and C represent the initials of countries' names, specifically, A stands for America while C signifies China. Hence, there was no metaphor B. In this way it was more obvious to search which country's economy was being described metaphorically in the corpus tool from the metaphor markers. In the coding, the word 'metaphorA' or 'metaphorC' was added manually as an index word to mark every metaphor in the language data so that the numbers of the metaphors could be recognized by the software AntConc after typing in the search term 'metaphor' and could also be distinguished from whether it was describing American or Chinese economic situations. This was because the software could not recognize metaphors automatically. It still depends upon human cognition and manual labor to identify metaphors in discourse and mark them. Hence, the term 'metaphorA/C' was put after the metaphor names and preceding the source domain in the coding. This was not a common practice among other researchers, but I used this way for easy search of metaphors in discourse. Nevertheless, I did not totally invent this way of coding either. It adhered to Lakoff and Johnson's framework which posits the formula: 'target domain is source domain' as a means of describing the 'metaphorical link between the domains'

(Croft and Cruse, 2004, p. 196).

For example, in the sentence ‘Although Mr. Obama *diagnosed* the problem correctly, ...’ (Article 1), the word ‘diagnosed’ was used metaphorically to present American economic problem as a disease that could be diagnosed. Hence it instantiated the metaphor ECONOMIC PROBLEM IS A DISEASE in which the target domain was ECONOMIC PROBLEM, and the source domain was DISEASE. In this example, the concept of economic problem that the news reporter discussed was being described as a medical problem or serious illness on and that it could be recognized and treated by doctors. The coding was inserted after the metaphorical word ‘diagnose’ in the sentence. It was coded as ‘Although Mr. Obama diagnosed [ECONOMIC PROBLEM IS A DISEASE metaphorA disease] the problem correctly, ...’ (Article 1). Although the target domain did not appear here in the sentence, it could be inferred from the context that this sentence was not really talking about a patient seeing a doctor but a mess or problem in American economy and the target domain was ECONOMIC PROBLEM. Therefore, the mapping could be illustrated as follows:

Figure 9 Mapping of Metaphor from Source Domain to Target Domain (diagnose)

Source Domain Lexical Item	• diagnosed (source domain: DISEASE)
Target Domain Lexical Item	• problem (target domain: ECONOMIC PROBLEM)
Metaphor Name	• ECONOMIC PROBLEM IS A DISEASE

(Adapted from Lakoff and Johnson, 2003, p. 53; Croft and Cruse, p. 55, 195; and visualized here)

There are advantages in using the existing metaphor list as a reference to code metaphors instead of relying on the researcher’s intuition to build a metaphor corpus in the first place. Zhang et Qu (2008) and Zhou et Wu (2015, p. 76) have pointed out that ‘it is interesting that research on corpus-metaphor studies mostly use self-built corpus’ and ‘research adopting existing metaphor databases such as Master Metaphor List, MetaBank, Metalude or Hamburg Metaphor Database were rarely seen’. However, using the existing metaphor list to code metaphors may help to recognize or judge whether a word or phrase is used metaphorically, and to help to decide the category of metaphors a metaphorical lexis belong to with verifiable bases. For example, in ‘As we all know, the *collapse* of

housing prices didn't...' (Article 8), the word 'collapse' was identified as being used metaphorically. But it might be difficult to decide whether it belongs to the metaphorical type of BUILDING or DISEASE given that both the basic meanings of '(OF BUILDING) to fall down or fall in suddenly, often after breaking apart' and '(OF SICK PERSON) to fall down (and usually become unconscious), especially because you are very ill/sick' were offered in Oxford Dictionary. Arrese and Vara-Miguel (2016, p. 155) grouped the corpus word 'collapse' in the DISEASE category. However, if searching the word in Lakoff's List (1991), 'collapse' was found to belong to the sub source category of 'Fortifications' (Lakoff *et al*, 1991, p. 118) which further belongs to CONSTRUCTED OBJECTS. Hence it was classified into the category BUILDING. In case like this I followed Lakoff's List as it was more systematic, conventional and basic.

In addition, the List was also useful in identifying conventional metaphors which used to be not obvious to recognize and which were also the focus of this study. For instance, in 'How the government can *help* things *along* (Sample 1)', it might be difficult to judge whether the fifth word 'help' was used metaphorically. However, compared with the sentence 'I need someone to *help* me *through* this problem' (Lakoff *et al*, 1991, p. 31) which was a model sentence in Lakoff's List (1991), it was identified as a metaphorical usage classified within the genetic metaphors (Rojo López et Orts Llopis, 2010, p. 3303) based on the EVENT STRUCTURE under the metaphor name ACTION IS SELF-PROPELLED MOTION (Lakoff *et al*, 1991, p. 27). Figure 10 below depicts the mapping of this conventional metaphor *help*.

Figure 10 Mapping of Metaphor from Source Domain to Target Domain (*help*)

Source Domain Lexical Item	• help (source domain: SELF-PROPELLED MOTION)
Target Domain Lexical Item	• economic action (target domain: ECONOMIC ACTION)
Metaphor Name	• ECONOMIC ACTION IS SELF-PROPELLED MOTION

In Lakoff's List, the metaphorical usage of *help* above belongs to the subcategory 5 'Lack of Change Resulting from Action is Lack of Motion' Special case 1 'Purposeful Action is Directed Motion to a Destination' No. 12 'Control over Action is Control over Motion' (1991, p. 31). In both sentences, the action of *help* does not merely mean to make things easier or possible. It is compared as a self-propelled motion or control from the

government or from someone, which is like a movement with a directed destination. The helpful action is powerful and even decisive which contains purpose and direction. This can be further proved from the words *along* and *through* which both compare the problem as a region in a landscape (A PROBLEM IS A REGION IN A LANDSCAPE) and ‘Approaches to a Solution are Paths in Landscape’ (Lakoff *et al*, 1991, p. 196).

Here I am not implying that there are definite or correct answers to decide the metaphor type of each metaphor or indicating that Lakoff’s List was the only or standard way, but to suggest a more reliable method through comparison with the already established inclusive metaphor database like Lakoff’s List (1991). It may help to marked metaphors systematically and thoroughly in research with the help of a unified metaphors list containing large number of metaphors. Just as Wu (2015, p. 76) has put it, ‘the feasibility of utilizing the established large-scale metaphor database for metaphor research is self-evident’.

Furthermore, Lakoff’s List (1991) was adopted ‘with modifications’ (Arrese and Vara-Miguel, 2016, p. 135) in this research in that the target domains in the list were broadly suitable for various kinds of discourses but not specific to the domain of economy. In the list, only one target domain ‘economic harm’ was found within the basic target category of HARM, along with INVESTMENTS and MONEY which were important elements in economic field. Therefore, the metaphor names were changed to be within the target domain categories of ECONOMY or FINANCIAL CRISIS (Spilioti, 2018; Charteris-Black, 2004), subcategories such as ECONOMIC MARKET (Li, 2007) and ECONOMIC PROBLEMS were also involved. Besides, some more recent source domains and updated metaphorical expressions appeared in the news articles in my data and could not be found in Lakoff’s List (1991). They were further compared with metaphors identified in other more recent studies related to economic metaphor analysis as compensations. The modifications of existing metaphor types not found in Lakoff’s (1991) List were listed and analyzed qualitatively and quantitatively in the analysis chapters as well.

3.4.6 Building Metaphor Corpus Associated with Chinese and American Economies

This section elucidates the general procedures employed for building metaphor corpus and selecting metaphors related to Chinese and American economies.

After the small-sized economic news corpus was built which has been introduced in previous 3.4.4, and all the metaphors identified and coded following procedures mentioned

in previous Sections 3.4.2 and 3.4.5, the content combined with metaphor coding in each word document was copied into a textfile (with the file suffix as ‘txt.’) because AntConc cannot recognize word documents but textfiles. Therefore, an economic news discourse corpus of 20 textfiles was formed. The textfiles were still named from number 1 to 20. They were illustrated in Appendix C. In order to distinguish from the original economic news corpus that only include topic associated news content, the corpus containing metaphor markings was named Corpus I. And as mentioned in metaphor coding in 3.4.5, metaphors in Corpus I include metaphors with the marking of

- metaphorA
- metaphorC

Given that the language data in Corpus I contained descriptions of both Chinese and American economies during April 2010 to March 2011, I distinguished the metaphors coded in the corpus by two kinds of metaphor markers - metaphorC and metaphorA so that the metaphorical descriptions of either Chinese or American economy could be searched via AntConc separately. Thus, paragraphs or sentences containing metaphors depicting Chinese economy was searched through ‘metaphorC’ while American economy through ‘metaphorA’.

However, this research aimed at exploring specifically the metaphorical depictions of Chinese and American economies during the American mortgage crisis, rather than merely providing broad metaphorical descriptions of the economic crisis in the two countries (Bickes *et al* 2014; Wang 2015; Gao 2016; Arrese & Vara-Miguel 2016; Lederer *et al* 2017; Spilioti 2018), it was necessary to carefully select economic entities and situations associated with these two economies along with their metaphorical expressions. Stefanowitsch (2004, 2006) has put forward a strategy of searching for target domain vocabulary to select metaphors that can limit the size of the corpus and with ‘a priori knowledge of the source domains’ (López and Llopis, 2010, p. 3301). This means researchers can select lexical items from target domains in association with focused topics to explore how they were mapped and instantiated through metaphors and do not need to analyze all metaphors randomly. López and Llopis (2010, p. 3303) adopted this method focusing on metaphorical expressions which contain lexemes from target domains to select metaphors to uncover similarities and differences in the conceptualization of financial and economic events under the influence of Global Systemic Crisis during 2007 and the end of 2008 in newspaper of English *The Economist* and Spanish *El Economista*. To carry out quantitative and qualitative analysis on metaphors associated with the research topic this study applied this method as well in the refining of metaphor selection to build

topic related metaphor corpora. The topic related lexis in target domains were gathered first and metaphors describing these target expressions were selected.

I firstly read through two articles about Chinese economy and American economy respectively and marked all economic entities associated with Chinese or American economy. This was for further comparison with the data in the two main corpora. Then the two corpora (Topic Corpus A and Topic Corpus C illustrated in 3.4.4) were put into AntConc to generate two-word lists of word frequencies. All economic entities describing Chinese or American economic situations during the mortgage crisis, such as “China, America, governments, markets, prices, housing, mortgage, rise, growth” were marked as potential target words in the two-word lists. Hence 92 potential target words in describing Chinese economy and 146 focusing on American economy were chosen.

From the two-word lists, all the potential target words of Chinese and American economic entities were grouped into four target word groups according to different economic processes: economic entities and agents, common economic mechanisms and behaviors, phenomena of real estate economy and economic trends during the mortgage crisis. The result of the two-word lists from AntConc reveals that there are 1355 words in Topic Corpus C and 2262 words in Topic Corpus A. Thus, the content in describing American economy was almost twice of that in describing Chinese economy. Due to the limit of time and space in this research and to carry out detailed qualitative analysis, I decided to reduce the metaphor corpora and not to study all metaphors instantiated by all the target words but focus on the more common metaphorical expressions. Following similar research by Arrese and Vara-Miguel (2016, p. 141), the target domain words were collected at least with a frequency of five in describing Chinese economy and ten in describing American economy. The reason why there were different frequencies included in the two corpora was that both the length of the news content in the selected news discourse and the number of target words in describing American economy was twice of those in describing Chinese economy. To balance the data in the two corpora to compare later in the discussion chapter and to keep the metaphor descriptions of the two economies with the same proportion, the selection frequency of target words also doubled in the description of American economy. Hence 38 potential target words (selected from 92 words by word frequency) related with Chinese economy and 33 potential target words (selected for 146 words by word frequency) with American economy were selected. These potential target words were compared with the economic entities marked in the former four articles in describing Chinese and American economies, and the result was that most of them were included in the economic entities being marked. The two forms of potential

target words representing the Chinese and American economies were listed below. These target words describing different perspectives of economies have been grouped into different economic categories, with each box in the table representing an economic category. The sequence of words within each box has been listed based on their frequency.

Table 5 Potential target words describing Chinese economy (38 words)

Economic entities and agents at different levels	Common economic mechanisms and behaviors	Real estate economy	Economic trends
Country level	market(s), wage(s), economy(ies), sale(s), prices, rate(s)	home(s), property(ies), mortgage(s), surplus, capital, credit, housing, subsistence, supply, flat(s)	rise(s)(ing), grow (th)(ing)(grew), turn(ing), fall(en)(ing)(fell), boom(ing), average, imbalances
China, government(s), Chinese, country(ies)			
City level	buy, demand, exchange, pay	Other economic field influenced by mortgage crisis	
Beijing		food, car(s)	
Companies			
Alibaba, firm(s)			
Banks			
bank(s), bankers			
Participants			
labor, workers, household(s)			

Table 6 Potential target words describing American economy (33 words)

Economic entities and agents at different levels	Common economic mechanisms and behaviors	Real estate economy	Economic trends
Country level	market(s), price(s), sale(s), rate(s)(ed), billion(s), economy(ies), industry(ies), tax(es), trade	mortgage(s), housing, credit(s), debt(s), subprime	crisis, recovery(ies), imbalances, story(ies), grow(th)(ing)(n)(grew)
America, government(s), American(s), federal(fed), Obama, state(s)			
City level		Other economic field influenced by mortgage crisis	
Florida		car(s)	
Companies			

Fannie, Freddie, firm(s)			
Banks			
Bank(s), bankers			
Participants			
Investor(s), people			

It can be observed that the economic categories in both tables above exhibit significant overlap. To determine whether and how the potential target words were metaphorically described, a manual examination of their items and lines in AntConc was conducted. Given that all metaphors in the data were previously coded (as stated in subsection 3.4.5), there was no need to reevaluate through context whether each potential target word was metaphorically described. Sentences containing each metaphorically used target word were manually copied into a new txt. file line by line. Given that many sentences contained more than one target word, the copying result involved repetition of sentences and metaphors. Therefore, all the repeated metaphorical sentences were deleted manually. Thus, two new databases (Metaphor Corpus C and Metaphor Corpus A) of metaphorical descriptions of potential target words focusing on different levels of Chinese and American economies during the American mortgage crisis were built. They were also included in the Appendix D and E. Subsequently all types of metaphors either describing Chinese or American economy focusing on the target words within the above two tables without repetition were input into AntConc to generate a metaphor list. The most frequently used ten metaphor types in describing both Chinese and American economies were selected for qualitative analysis along with relevant examples. Such a selection was designed to specifically focus on potential target words with high frequencies, encompassing various types of metaphors that appeared at least ten times in depicting either Chinese or American economy.

3.4.7 Validity and Reliability Strategies

It is crucial to acknowledge that even a CDA analyst may not be entirely immune to ideological influences in news, and no methodology could completely evade accusations of bias. Therefore, I implemented several steps to mitigate my own biases that could potentially impact my analysis, ensuring the validity and reliability of both quantitative and qualitative measures. In this research, I primarily followed Creswell and Creswell's (2003) guidelines on strategies for enhancing validity and reliability.

Creswell and Creswell (2003) proposed a range of quantitative and qualitative threats to validity that researchers may encounter, along with corresponding strategies to address

these threats in research. In relation to my study, the internal and external validity threats from a quantitative perspective were relevant. From a qualitative standpoint, my study incorporated four out of the eight primary qualitative validity strategies outlined by Creswell and Creswell (2023, p. 1715-1717). These strategies included method triangulation, utilization of rich descriptions to effectively convey findings, self-reflection/clarification of biases, and spending prolonged time in the research field.

Quantitatively, this study encountered both internal and external threats to validity (Creswell and Creswell, 2023, p. 1148). The primary objective of this research was to analyze salient frequent conventional metaphors as well as prominent new metaphors in economic discourse. By ‘new’, I specifically refer to metaphor types that are entirely original and have not been previously discussed in other studies within the field of CMA, rather than modifications of existing ones. Potential internal threats arose from the ‘history’ of novel metaphors and the ‘selection’ of conventional metaphors (Creswell and Creswell, 2023, p. 1149) from my linguistic data. Given that the news articles used in this study were published over a decade ago, language evolves over time and research in this field progresses as ‘time passes’ (Creswell and Creswell, 2023, p. 1451). Consequently, some metaphor types considered novel at the time of publication might have already been identified by other researchers since then and are no longer considered new today. To avoid misclassifying ‘old’ metaphors as new ones mentioned earlier in Sections 2.3.2 and 3.4.5., the obtained results from the data were compared with recent metaphor research conducted within the field other than Lakoff’s List (1991). This ‘influenced the outcome’ (Creswell and Creswell, 2023, p. 1451) of novel metaphor types in this study. It turned out that there were no novel metaphor types remaining unexplored in any other research after more than a decade has passed; therefore, my study also aimed to focus on recently identified metaphor types which were not included in Lakoff’s List (1991) as a means of compensation for this limitation. These recent while not originally new metaphors were regarded as modifications of existing metaphor types. However, it is important to argue that even though it may be challenging to identify novel metaphors in the relatively ‘old’ discourse from today’s perspective, this does not imply that analyzing discourse during that time was not valuable. On the contrary, it holds significant meaning as it captures a critical moment of change and warrants exploration into how these metaphors were perceived in media. Furthermore, recent metaphors still hold prominence alongside original metaphors according to Newmark’s (1980) ranking of metaphoricity mentioned in section 2.3.2. Additionally, employing MIP along with comparisons with Lakoff’s List (1991) and findings from other researchers’ work enhances the selection of systemic

metaphors in terms of validity. This List (1991) and other relevant findings enabled me to minimize potential errors resulting from relying solely on intuition.

As a Chinese national with an Eastern cultural background, I was aware of the potential external validity threats posed by my own ‘experimenter bias’ (Creswell and Creswell, 2023, p. 1469), which may predispose me to subjectively anticipate a higher prevalence of negative metaphors characterizing the Chinese economy and more positive metaphorical portrayals of the American economy in Western media such as *The Economist*. To mitigate this bias, I employed ‘blinding’ strategies (Creswell and Creswell, 2023, p. 1469) by utilizing corpus software AntCont to objectively select metaphors for analysis based on the data. The analysis of metaphors was grounded in the data and supported by ‘proven instances of language use’; thus, my ‘intuitions’ were ‘measured against attested linguistic evidence’ (Charteris-Black, 2004, p. 31). The utilization of this corpus tool not only ‘facilitated’ metaphor data collection and selection ‘for data analysis’ (Creswell and Creswell, 2023, p. 1139), but also enhanced external validity. Moreover, I used the same software program along with target domain variables listed in Table 5 and Table 6 in Section 3.4.6 to select metaphors describing both Chinese and American economies, and identical metaphor identification and coding procedures, thereby improving research reliability through quantitative measures that assess instrument repeatability, as well as consistent identification, coding, and selection procedures (Creswell and Creswell, 2023, p. 1142). Consequently, these metaphors were compared within a unified framework while exhibiting appropriate ‘inter-correlation’ and ‘internal consistency’ (Creswell and Creswell, 2023, p. 1143).

Qualitatively, employing ‘multiple approaches’, particularly the ‘triangulating ‘perspectives’, enhances the ‘validity’ of a study (Creswell and Creswell, 2023, p. 1715). Guided by the principle of ‘triangulation’ and interdisciplinary research, CDA has evolved beyond analyzing isolated texts to explore how language choices in discourse trigger ideology and social semiotics through corpus and psychological experiments (Hart 2016, 2018). To mitigate excessive subjective interpretation, CDA places significant emphasis on triangulation as its primary methodological principle (Hart 2016, 2018; Zhang and Yang, 2019, p. 7; Zhang and Zhang 2020). The methodological triangulation (Kumar, 2019, p. 33, 489; Dezin and Lincoln, 1994) in my study involves utilizing multiple means of inquiry to verify results from various angles through converging evidence (Hart, 2016, p. 2; Zhang and Yang 2019, p. 8). In order to uphold the promise of triangulation in critical discourse research, several methodological perspectives are adopted. Hart (2016, p. 3; Zhang and Yang 2019, p. 8) highlights diverse ways to embody triangulation within CDA with recent

incorporation of corpus linguistics by critical cognitive linguistics scholars. Nuñez-Perucha (2011, p. 101) argues that Cognitive Linguistics can make a valuable contribution to the examination of ideologies by uncovering the hidden, unconscious aspects underlying language users' 'conscious beliefs'. Thus, my study employed cognitive linguistic methods as effective research practices for identifying expressions in news articles. It also integrated qualitative investigations with systematic corpus-assisted quantitative studies to analyze metaphorical language expressions. As a result, multiple approaches encompassing CDA theories, cognitive linguistics principles, and corpus methodology provided "more strategies available to verify the accuracy and credibility of the findings" (Creswell and Creswell, 2023, p. 1714).

Furthermore, Sections 4.2.3 and 5.2.3 provide rich qualitative descriptions of metaphor instances analyzed from the perspective of 3Ts - Type, Tone, and Tell (introduced in Section 1.4) to convey the findings effectively. To ensure the trustworthiness of my identification and discussion of metaphor types, I adopted additional 'strategies and procedures' (Creswell and Creswell, 2023, p. 1713) such as MIP and comparison with Lakoff (1991) and other researchers' results instead of relying solely on my intuition due to potential interference from my Chinese cultural background to increase 'trustworthiness' (Creswell and Creswell, 2023, p. 1713). Although the linguistic data used in this study was not the most recent, prolonged time spent investigating and summarizing the findings allowed for a comprehensive analysis that adds to its qualitative validity and reliability (Gibbs, 2007; Creswell and Creswell, 2023, p. 1713, 1721). Additionally, documenting each step of the research process from data collection and selection to coding processes enhanced its transparency while Tables and Figures presented throughout this thesis or in Appendices demonstrated consistency in approach (Creswell & Creswell, 2023, p. 1721-1722; Yin, 2009).

3.5 Summary

This chapter presented the data source and methodology applied in this thesis. Twenty pieces of news articles depicting the economies of China and America were selected from *The Economist*'s online version between April 2010 and March 2011, a period marked by the global financial crisis and China's rise to become the world's second-largest economy. The objective was to identify and compare economic metaphors used in the newspaper to describe both traditional Eastern (Chinese) economy and Western (American) economy following the crisis.

This research has combined quantitative and qualitative methods and incorporated

manual work and corpus tool in metaphor identification and analysis. MIP designed by Pragglejaz Group (2007) and metaphor formula and expressions in Lakoff's List (1991) were applied in metaphor identification and coding, incorporated with the way to mark metaphors that I designed combining metaphor name, index word and source domain that were easy to be recognized in corpus tool. The way of metaphor marking and coding was an effective attempt to combine manual and machine recognition of metaphors.

The economic metaphor corpora were built based on economic news discourse corpus. The selected economic news articles with their topic related content were built into an economic news corpus. Content irrelevant to the research topic were excluded in these selected economic discourses. Metaphors identified and coded in these discourses were further reduced in accordance with frequent target word lists generated from AntCont in order to carry out topic related qualitative analysis. To minimize my own biases, quantitative and qualitative validity and reliability steps and strategies including the means of blinding in metaphor selection with the help of corpus software, triangulation research approaches and all the procedures addressed above such as MIP and comparison with Lakoff (1991) and other people's findings were all taken to enhance the accuracy of my research. In the next analysis chapters and the discussion section, the selected topic related economic metaphors describing the two countries were categorized and compared and their similarities and differences were discussed.

Chapter 4 Quantitative and Qualitative Metaphorical Descriptions of the Chinese Economy

4.1 Introduction

This chapter aims to discuss how China's images were depicted metaphorically in economic discourse under the influence of American subprime crisis from April 2010 to March 2011. Metaphorical expressions related to the Chinese economy in the selected economic news articles were analyzed quantitatively and qualitatively. As stated in Sections 2.3.2 and 3.4.6, metaphors include target domains and source domains. The target domains may include many different concepts, which was also the case in this research. This research focuses on identifying source domain metaphorical expressions and all metaphors identified herein describe how the target domains of either CHINESE ECONOMY (in this chapter) or AMERICAN ECONOMY (in next chapter) were framed by different source domain concepts. Hence economic concepts in the data that are specifically associated with Chinese economic situations or the economic roles the Chinese economy played during the crisis were regarded as being contained in the target domains of CHINESE ECONOMY. As shown in Table 5 in Section 3.4.6, these economic concepts included CHINA, GOVERNMENT, BANK, MARKET, and MORTGAGE. The framework of combining MIP (mentioned in Section 3.4.2) and Lakoff's List (1991) (mentioned in Section 3.4.5) in identifying and coding metaphorical source domains was adopted in this study. Metaphor categories and types being identified from the data were illustrated with their frequencies and examples. Through the analysis, the metaphorical images of China in news reports in *The Economist* during the financial crisis were portrayed.

4.2 Quantitative and Qualitative Analysis of Metaphors in the Description of the Chinese Economy

This section presents a comprehensive quantitative and qualitative analysis of metaphors used to describe the Chinese economy. Firstly, all metaphor types identified in the language data associated with the Chinese economy were systematically categorized to provide an extensive overview of its metaphorical depiction. Furthermore, a comparison was drawn between these metaphor categories and those found in previous studies. Subsequently, the ten most frequently occurring metaphor types and their frequencies were listed along with illustrative examples. Following the quantitative study, each of these ten

metaphor types was qualitatively explained through typical examples and analysis while also compared with previous research findings. In accordance with Chow (2010, p. 158), sentences containing metaphor examples presented within analytic chapters (Chapter 4 and 5) have been marked with (A number) or (C number); for instance, (A1) or (C1) indicated whether the example described America or China respectively while also specifying which news article from our dataset it was extracted from. Similar to Sections 3.4.4 and 3.4.5, ‘A’ represented America while ‘C’ represented China correspondingly. The numbers assigned to news articles followed their publication date sequence as stated in Table 3 mentioned earlier in Section 3.2.4. Given that titles and publication dates have already been provided in Table 3, and all news articles were selected exclusively from *The Economist* rather than other media sources, this approach aims to offer clear guidance to readers while avoiding unnecessary verbosity.

4.2.1 Main Categories of all Metaphors in Describing Chinese Economy

The research identified 76 types of metaphors of different source domains in describing the Chinese economy, as measured by Cluster Types in AntConc. These metaphors were extracted from the data obtained through the Cluster/N-Grams tab, which scans the entire corpus for clusters of words with lengths ranging from 1 to 2 or more words (Anthony, 2020, p. 2). A total of 356 concordance hits were found using Cluster Tokens in AntConc. Table 7 presents all the metaphor types and their respective categories.

Table 7 Metaphor categories and all metaphor types in describing Chinese economy

Metaphor categories	Metaphor types and frequency of each type	Total number and Percentage
MECHANICAL	PHYSICAL PROPERTIES 76, CONTAINER 22, MACHINES 11, ACCOUNTING 8, OBJECTS 6, SCALE 4, COVER 4, TRANSFER 4, BRITTLE 3, COMPARISON OF PHYSICAL PROPERTIES 3, WHOLE 3, PHYSICAL CLOSENESS 3, BUILDINGS 2, CONTROL 2, FORCES BETWEEN THE DESIRED AND THE DESIRER 2, LINKED 2, UP 2, BALANCE 1, CAUSING FUNCTIONAL OBJECT TO BE NONFUNCTIONAL 1, EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS 1, LOCKED 1, REPLACEMENT 1, SIZE 1, LACKING 1	24 types; 164; 46.1%
ORGANISM	SELF-PROPELLED MOTION 20, PEOPLE 13, PLANTS	24 types; 83; 23.3%

	10, POSSESSIONS 4, MORAL 4, PREVENTING 4, BODY 3, BEING 3, SCANDAL 2, CHILDREN 2, ENTITIES 2, SERVER 2, STAGE 2, WRITING 2, MAINTAINING 1, PERCEPTIONS 1, CLEANLINESS 1, FOLLOWING 1, LIFE 1, MAKING 1, POINTS 1, RECEPTION 1, SEEING 1, WEALTH 1	
JOURNEY	LANDSCAPE WE MOVE THROUGH 14, JOURNEY 11, LOCATION 11, CHANGE 9, PATHS 6, MOTION 4, AREAS 2, FORWARD 1, MOVING 1	9 types; 59; 16.6%
NATURAL	LIQUID 10, RESOURCE 3, BUBBLE 3, SOUND 2, CLIMATE 2, LIGHT 2, DARKNESS 1, DISASTER 1, DAMAGE 1, SOURCE 1	10 types; 25; 7.0%
WAR	WAR 5, COMPETITION 3, ADVERSARIES 2, RISK 2, FIGHTING 1, RACE 1, WEAPONS 1	7 types; 15; 4.2%
DISEASE	PHYSICAL INJURY 9, DISEASE 1	2 types; 10; 2.8%
Total number		76 types; 356; 100%

The concordance hits for each metaphor type are indicated by the numbers following them in the table. The right column of the table displays the number of metaphor types, total concordance hits within each category, and the percentage that each category represents out of all metaphors used to describe the Chinese economy. The percentage was calculated by comparing the concordance hits of all metaphor types within a category with the total number of metaphors describing the Chinese economy. For instance, in the DISEASE category, there are two metaphor types: PHYSICAL INJURY and DISEASE, with 9 and 1 concordance hits respectively (indicating their frequency in data). The percentage for this metaphor category (DISEASE) is derived from dividing the sum of all metaphor types within that category by the total concordance hits for all metaphors describing Chinese economy - resulting in $(9+1)/356*100\% = 2.8\%$ (Arrese, 2015, p. 29). The percentage provides the statistical weight of each metaphor category in the whole data. All six metaphor categories are listed based on their frequencies from most frequent to least frequent ones; likewise, all metaphor types within each category are also arranged according to their frequency. The top ten most frequent metaphors discussed further in Section 4.2.2 have been included in these six categories as well and are highlighted in red color on this table. Almost all ten frequently occurring metaphors appear among these top three categories which ensure consistency between both frequency results - those related to specific metaphor categories and individual metaphor types themselves. The four green-colored metaphors listed here did not appear on Lakoff's (1991) List but have been

discussed extensively in recent relevant research. Considering their potential salience (refer to Section 2.3.2) and research significance in economic discourse, a more detailed exposition is provided in Section 4.2.4.

As outlined in Section 2.4.1 and 2.4.2, this study employed the metaphor categories proposed by Arrese (2015) and Arrese and Vara-Miguel (2016) to classify metaphor categories identified in the linguistic data collected for this research. However, subtle variations emerged since different countries' economies may lead to changes in metaphor categorization. Furthermore, their studies primarily focused on 'the global crisis that began in 2008 and those related to the euro crisis' (Arrese, 2015, p. 25), examining economic news discourse across various European countries. In contrast, my research specifically investigates the impact on China and America during the American mortgage crisis while excluding content associated with the aftermath of the euro crisis. Consequently, there are discrepancies regarding 'certain general categories that emerge as dominant' (Arrese and Vara-Miguel, 2016, p. 138). Thus, modifications have been made to metaphor categories compared with those presented by Arrese (2015) and Arrese and Vara-Miguel (2016)'s classification system. In Arrese (2015) and Arrese and Vara-Miguel (2016), the metaphor categories and their corresponding labels are as follows:

- 1) health and disease (DISEASE);
- 2) natural events and disasters (NATURAL);
- 3) events around artefacts and constructions (MECHANICAL);
- 4) wars and clashes (WAR);
- 5) sports, games, and entertainment (SPORT & ENTERTAINMENT);
- 6) actions and situations of living beings (ORGANISM).

(Arrese, 2015, p. 25; Arrese and Vara-Miguel, 2016, p. 136)

In contrast, Table 7 shows that the metaphor types used to describe the Chinese economy in this study do not include sports, games, and entertainment (item 5), but instead feature the concept of JOURNEY, which is also evident in previous studies by Esager (2011), Skorczynska and Deignan (2006), and Gao (2016). However, while Skorczynska and Deignan's (2006) study did not use JOURNEY to describe China specifically but rather other countries during the 2008 economic crisis, Gao's (2016) research found JOURNEY metaphors in both English and Mandarin Chinese economic news headlines. Additionally, this study identified further metaphor types within the WAR category such as COMPETITIONS and RISKS that may also involve clash and conflict. As a result, two

major changes were made to the six categories suitable for describing the Chinese economy: 1) SPORT & ENTERTAINMENT was replaced with JOURNEY; and 2) concepts of competitions and risks were added to the WAR category. Therefore, this research proposes modified six categories for describing the Chinese economy as follows (changes marked in bold):

- 1) health and disease (DISEASE);
- 2) natural events and disasters (NATURAL);
- 3) events around artefacts and constructions (MECHANICAL);
- 4) wars, clashes, **competitions and risks** (WAR);
- 5) **journey** (JOURNEY);
- 6) actions and situations of living beings (ORGANISM).

The concepts of these categories are largely self-evident. Here, I provide a few examples for illustration purposes. For instance, in the DISEASE category, the concept of DISEASE refers to a condition that impairs normal functioning in a living body and manifests symptoms such as SICKNESS and INJURY. In ‘The economy, which has been fuelled by huge government cash *injections* as well as by property and stock market bubbles, will cool.’ (C10), the economy is metaphorically depicted as being sick and unwell and treated with *injections*, symbolizing the infusion of government funds. Furthermore, in another sentence ‘If mortgages did turn sour, how badly would China’s banks *suffer*?’ (C3), economic harm is described as physical injury on China’s banks. Through the use of the metaphor expression *suffer*, China’s banks are compared to living bodies capable of being injured. The category of WAR conveys meanings related to confronting difficulties, rivalry, antagonism or adversity. For example, in the sentence ‘China’s top e-commerce firm *fights* to win back customers’ trust.’ (C19), the challenging task of gaining customers’ trust is likened to *fighting* a war. The use of *fights* portrays the arduous economic circumstances faced by China’s top e-commerce firm. Lastly, among these six categories mentioned, the category of ORGANISM emerges as the most complicated and inclusive (Steinert 2010; Arrese 2015; Arrese and Vara-Miguel 2016). It encompasses actions performed by living beings, particularly physical and spiritual activities, as well as situations or evaluations within human life that involve concepts like MORALITY, SCANDAL, and CLEANLINESS. This is exemplified in this sentence: ‘It investigated the reports of fraud thoroughly and was forthcoming in publishing details, in sharp contrast to some other *scandal-tainted* Chinese firms (C19). The inappropriate

economic fraud committed by Chinese firms is characterized as a SCANDAL rooted in ethical concerns. It employs the metaphor of MORALITY IS CLEANLINESS (Lakoff *et al.*, 1991, p. 186) through the usage of *tainted*. Meanwhile, the LIGHT/DARK metaphor (Lakoff *et al.*, 1991, p. 2) portrays business prospects as natural phenomena falling under the NATURAL category beyond human control. For instance, in ‘No doubt, but it emerged at a time when Alibaba’s broader business prospects have seemed to be *dimming*.’(C19), where this metaphor highlights natural light associated with economic outcomes while implying that Alibaba may encounter challenges in altering its unfavorable situation since GOODNESS IS LIGHT / BADNESS IS DARKNESS (Lakoff *et al.*, 1991, p. 190), emphasizing the negative aspect of business prospects through *dimming*.

To ascertain whether the observed differences are attribute to the variable of ‘the effect of the newspapers type’ (Arrese, 2015, p. 30), it is necessary to compare the metaphor categories describing Chinese economy with similar research that also examines those used during a comparable period of financial crisis and those employed in *The Economist*. In the subsequent paragraphs, I compare the six metaphor categories that describe the Chinese economy in my study - MECHANICAL (164; 46.1%), ORGANISM (83; 23.3%), JOURNEY (59; 16.6%), NATURAL (25; 7%), WAR (15; 4.2%) and DISEASE (10; 2.8%) - with previous studies. Firstly, I compare them with metaphor categories identified by Arrese and Vara-Miguel (2016) and Arrese (2015) which examined metaphors used during the same financial crisis discussed in my research. Subsequently, I compare these categories with Charteris-Black’s (2004) CMA study on economic metaphors found in *The Economist* to identify similarities and differences between them. To facilitate these comparisons, side-by-side tables and bar charts are employed.

Arrese and Vara-Miguel (2016) as well as Arrese (2015) conducted studies on the usage of ‘financial crisis metaphors’ in economic news discourse, specifically focusing on the impact of the ‘economic and financial crisis (2008)’ (Arrese and Vara-Miguel, 2016, p. 135, 151; Arrese, 2015, p. 19). Arrese and Vara-Miguel (2016) examined financial crisis metaphors in newspapers published in six countries within the western European Union: the United Kingdom, Italy, Greece, Spain, Netherlands, and Finland (Arrese and Vara-Miguel, 2016, p. 138). The researchers identified a total of six metaphor categories: DISEASE (412; 27.8%), NATURAL (370; 24.9%), ORGANISM (245; 16.5%), MECHANICAL (216; 14.6%), WAR (181; 12.2%) and SPORTS & ENTERTAINMENT (56; 3.8%) (Arrese and Vara-Miguel, 2016, p. 143). Similarly, Arrese (2015) examined metaphorical depictions of ten countries within ‘the European Union (the United Kingdom,

Italy, Greece, Spain, Netherlands, Belgium, Finland, Germany, France and Poland)’ in four different newspapers – *ABC*, *El Mundo*, *El Pais* and *Expansi ón* (Arrese, 2015, p. 26). The metaphor categories in total were DISEASE (212; 27.3%), ORGANISM (150; 19.3%), NATURAL (141; 18.1%), MECHANICAL (111; 14.3%), WAR (91; 11.7%) and SPORTS & ENTERTAINMENT (72; 9.9%).

The two studies examined the use of financial crisis metaphors to depict EU countries, and the frequencies of metaphor categories were found to be quite similar between them. The only notable difference lies in the relative proportions of the NATURAL and ORGANISM categories, with Arrese and Vara-Miguel’s (2016) showing a higher frequency for NATURAL category compared to Arrese’s (2015). However, this difference is not statistically significant. I have compiled the results from both studies together with the distribution of metaphor categories describing the Chinese economy in Table 8 below. The left two columns represent the distribution of metaphor categories used in my study for describing the Chinese economy. The middle two columns present findings from Arrese and Vara-Miguel’s (2016) research on six European countries’ economies, while the rightmost two columns display results from Arrese’s (2015) study focusing on ten EU economies.

Table 8 Comparison of metaphor categories’ distributions in describing Chinese economy and European economies in financial crisis in different newspapers

Metaphor categories describing Chinese economy	Frequency and percentage	Metaphor categories describing six EU economies	Frequency and percentage	Metaphor categories describing ten EU economies	Frequency and percentage
MECHANICAL	164; 46.1%	DISEASE	412; 27.8%	DISEASE	212; 27.3%
ORGANISM	83; 23.3%	NATURAL	370; 24.9%	ORGANISM	150; 19.3%
JOURNEY	59; 16.6%	ORGANISM	245; 16.5%	NATURAL	141; 18.1%
NATURAL	25; 7%	MECHANICAL	216; 14.6%	MECHANICAL	111; 14.3%
WAR	15; 4.2%	WAR	181; 12.2%	WAR	91; 11.7%
DISEASE	10; 2.8 %	SPORTS & ENTERTAINMENT	56; 3.8%	SPORTS & ENTERTAINMENT	72; 9.9%

The table presented above demonstrates that the metaphor categories used to describe EU countries in the studies conducted by Arrese and Vara-Miguel (2016) and Arrese (2015) exhibit similarities in terms of types, rankings, and distributions, except for a switch between the positions of NATURAL and ORGANISM categories. These findings support

their argument that there is a similarity in ‘metaphorical conceptualization of economic phenomena’ ‘across different countries’ (Arrese, 2015, p. 23), indicating a dominant ideological universality in the usage of conceptual metaphors among newspapers despite the unique, novel, and complex nature of each country’s situation in the crisis (Arrese, 2015, p. 31). However, when examining metaphor categories describing the Chinese economy, it can be observed that while the types are roughly similar to those found in EU economies, their rankings display contrasting patterns particularly at higher ranks. Table 8 clearly illustrates that DISEASE is infrequently employed as a metaphor category for portraying China within this study compared to its prevalent use when describing European countries. And NATURAL metaphors rank among the top three when depicting European economies. According to Arrese and Vara-Miguel, ‘disease and nature’ are considered as ‘inanimate metaphors’ relative to other ‘conceptual metaphors’ (2016, p. 148). Metaphorical expressions such as ‘contagion’ under DISEASE category or ‘storm’ under NATURAL category are ‘conventional metaphors representative of the western economic discourse (Boers and Demecheleer 1997). The prominence of DISEASE and NATURAL categories that run top may suggest that these described countries appear weak and severely affected by injuries during crises situations; implying an ‘uncontrollable’ aspect of the crisis which cannot be ‘easily managed’ solely through ‘human intervention’ (Arrese and Vara-Miguel, 2016, p. 148). Therefore, the destiny of nations is influenced either by infectious factors or external causes, suggesting a passive and vulnerable role for economic entities during times of economic crisis. Although the DISEASE metaphor may appear conventional, it holds significant research value and remains vital in the contemporary era. These traditional metaphors are also observed to dominate public discourses in the British and German financial press (Charteris-Black and Mussolff 2003). The economic crisis can be likened to a ‘contagious’ DISEASE that spreads rapidly and extensively. In this study, I adopt the category of DISEASE as well. However, in contrast to prevailing passive metaphorical descriptions, the MECHANICAL category emerges as the most frequent when depicting the Chinese economy compared to EU countries during and after the crisis. This signifies a ‘reverse shift from biological (animate) towards mechanical (inanimate)’ metaphors (Charteris-Black, 2004, p. 137), potentially reflecting news reporters’ intention to position themselves as narrative commentators rather than predictors of events (Charteris-Black, 2004, p. 136). Thus, it indicates some uncertainty surrounding events occurring in China’s economy during the crisis period and serves as a means for text producers to distance themselves from China’s economy. Additionally, descriptions of China’s economy were not entirely passive but occasionally even active; for instance, the

mechanical metaphorical description such as ‘the economic engine of world’ portrays quite an opposite image from passivity. In contrast, when describing European economies, the NATURAL and ORGANISM categories rank higher than the MECHANICAL category. The NATURE category provides clearer framing for discussing how the crisis has been addressed in public discourse (Arrese, 2015, p. 29) but ranks lower when depicting China’s economy. On the other hand, the ORGANISM category which encompasses various metaphorical expressions originating from ‘heterogeneous source domains’ holds second place in terms of frequency (Arrese, 2015, p. 29). In Arrese and Vara-Miguel’s (2016) and Arrese’s (2015) research on EU countries, economic situations seem to be more clearly described due to their inclusion of NATURAL category among top three positions. This implies that during the time of crisis, there is comparatively limited understanding regarding economic situation in China. In addition, the distribution of WAR metaphor overlaps in the side-by-side table across all three rankings. It is infrequently used and occupies second last place. Moreover, this metaphor is particularly scarce when describing the evaluation of the Chinese economy based on percentages. JOURNEY metaphor is a new addition found only in left column describing Chinese economy above. And SPORTS & ENTERTAINMENT category is not contained Chinese economic depictions.

Charteris-Black’s (2004) research also utilized news articles from *The Economist* to build his linguistic corpus. However, he did not specify the countries that these metaphors are describing; instead, he select metaphors that are ‘specific to financial reporting’ (2004, p. 140). The study included various countries such as New Zealand, Germany, Canada, Russia, Europe, Brazil, Iraq and America (Charteris-Black, 2004, p. 143-160), but China was not represented in the data. For example, Charteris-Black (2004) briefly discussed the economic crisis in Brazil that precipitated a global financial collapse, employing approximately ten metaphorical expressions in his analysis (Charteris-Black, 2004, p. 152). However, this discussion did not constitute the primary focus of the study. In Charteris-Black’s (2004) study on conceptual metaphors in financial reporting, ten metaphorical domains were identified: CONFLICT, MENTAL HEALTH, DISASTERS, PHYSICAL HEALTH, WAYS OF MOVING IN THE AIR, BEHAVIOUR OF GAS, WAYS OF MOVING ON THE GROUND, WAYS OF MOVING IN THE WATER OR NAUTICAL CONDITIONS, NUCLEAR DISASTER and EARTHQUAKE (2004, p. 141). Although he did not categorize metaphors into six categories, as conducted in my research, the results can still be compared since some of his metaphors can also fit into the six categories used in this thesis. For instance, in Charteris-Black (2004)’s research, the source domain of PHYSICAL CONFLICT could be categorized under WAR metaphor category in

this study. Charteris' (2004) study reveals that 'the domain of war accounts for 28% of all metaphors', making 'PHYSICAL CONFLICT the most resonant conceptual metaphor' (2004, p. 141, 143). Two types of metaphor - 'A STATE OF MENTAL HEALTH (25%) and A STATE OF PHYSICAL HEALTH (9%)' (Charteris-Black, 2004, p. 141, 146) - can be classified under DISEASE category in this research accounting a total percentage of 39%. Furthermore, EARTHQUAKE can fall under DISASTERS category. Therefore, the ten metaphor domains identified by Charteris-Black's (2004, p. 141) can be generalized into the six categories in this research (as shown in the table on the right). The metaphor categories used in this research and those discussed by Charteris-Black (2004) are presented side-by-side below for comparison purposes. Given that Charteris-Black does not use occurrence numbers but resonance of source domains as 'a measure of their productivity' (Charteris-Black, 2004, p. 89), which is beyond the scope of this study's discussion; therefore, only percentages but not occurrence numbers in the corpus are used to list the distributions and rankings of the source domain categories in the tables below.

Table 9 Comparison of metaphor categories' distributions in describing Chinese economy and other countries' economies in *The Economist*

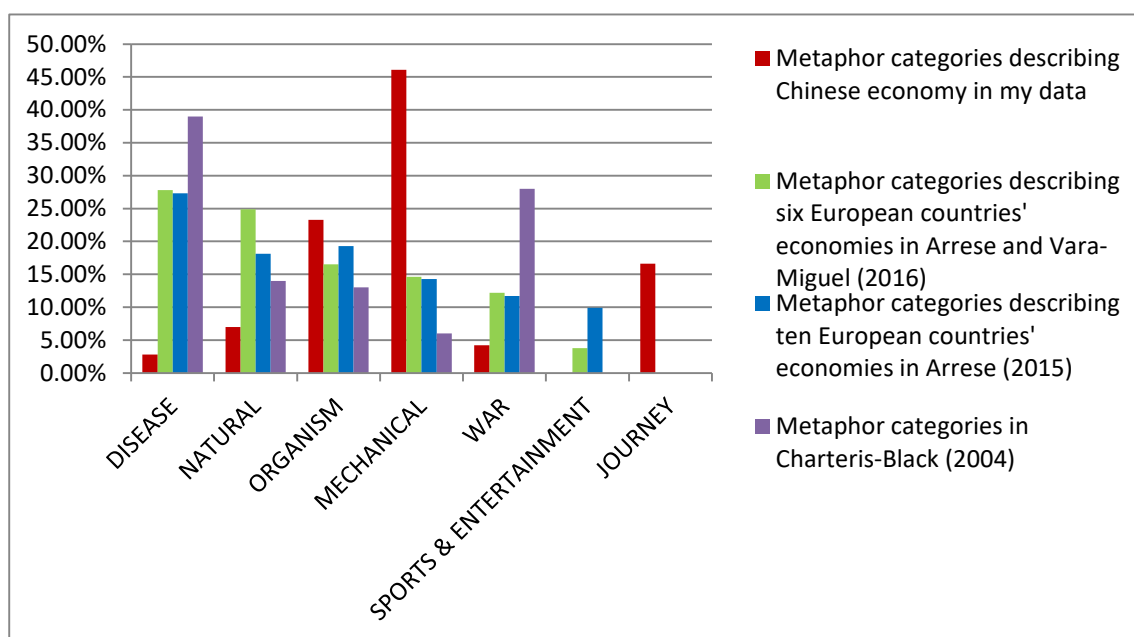
Metaphor categories describing Chinese economy	Percentage	Metaphor categories describing other countries	Percentage
MECHANICAL	46.1%	DISEASE	39%
ORGANISM	23.3%	WAR	28%
JOURNEY	16.6%	NATURAL	14%
NATURAL	7%	ORGANISM	13%
WAR	4.2%	MECHANICAL	6%
DISEASE	2.8%		

The comparison table above demonstrates that in Charteris-Black's (2004) study, the WAR metaphor category, which signifies conflicts, ranks second highest. However, this category is significantly less utilized when describing the Chinese economy in my data. Based on the comparative analysis of Chinese and European economies presented earlier, and considering the comparison Table 9 above, similar to Arrese and Vara-Miguel's (2016) and Arrese (2015) studies, DISEASE and NATURAL categories in Charteris-Black (2004) also rank among the top 3 in describing financial reporting in *The Economist* with DISEASE on top. Conversely, when describing the Chinese economy, MECHANICAL and ORGANISM categories are predominantly employed while DISEASE, WAR, and NATURAL categories assume lower positions. Nevertheless, these latter three categories

occur more frequently both in financial reportings from *The Economist* that do not specify countries according to Charteris-Black (2004), as well as when describing European countries based on Arrese and Vara-Miguel's (2016) and Arrese's (2015) research findings. Thus, the description of China in *The Economist* exhibits an almost opposite pattern compared to metaphorical descriptions of other countries.

The comparative findings of metaphor categories as examined in this research, and previous studies by Arrese and Vara-Miguel (2016), Arrese (2015), and Charteris-Black (2004), can be more effectively visualized through the following bar chart.

Figure 11 Distributions of metaphor categories describing Chinese economy and European countries' and other countries' economies



Considering the varying occurrence of metaphors across different research articles in newspapers, the results are presented as percentages. The bar chart provides a more pronounced contrast. Upon examining the chart above, it becomes evident that metaphor categories related to DISEASE, NATURAL phenomena, and WAR (represented by long green, blue, and purple bars) occur less frequently when describing the Chinese economy (indicated by short red bars). Conversely, metaphor categories such as MECHANICAL processes, ORGANISMS, and JOURNEYS (represented by long red bars) are more prevalent in depicting the Chinese economy compared to European and other countries' economies which exhibit few or no instances of these categories (short blue, green, and purple bars). SPORT & ENTERTAINMENT metaphors exclusively appear in descriptions of European economies. As a result, the distribution proportions of metaphor categories used to describe the Chinese economy were almost completely opposite to those used for

European and other countries' economies. Specifically highlighting that MECHANICAL and JOURNEY metaphors are employed with greater frequency when characterizing the Chinese economy (long red bars), while DISEASE and NATURAL metaphors predominate in depictions of European and other economies. Although WAR metaphors rank low within both datasets describing European countries; however, from observing the bar chart it is apparent that their usage is comparatively lower when describing the Chinese economy.

To sum up, the metaphor categories in my study are compared with those of European countries during the financial crisis in various newspapers and with those of other countries as reported in *The Economist*. Taking all the above into consideration, it is evident that different newspapers may employ different metaphors, yet there exist similarities and overlapping metaphor categories. However, when consistently examined rather than isolated, certain similarities can be drawn from relevant previous studies. A discernible pattern seems to emerge wherein the ranking of metaphor categories in Arrese and Vara-Miguel (2016), Arrese (2015), and Charteris-Black (2004), following a sequence of DISEASE, NATURAL, MECHANICAL; optionally accompanied by SPORTS & ENTERTAINMENT at the bottom. Notably, DISEASE emerges as the most prevalent metaphorical category, as mentioned by Arrese (2015): "the metaphors around health and disease (DISEASE) are the most common" (2015, p. 29). Additionally, ORGANISM and NATURAL share second and third places respectively across these studies. In describing ten European economies, the ORGANISM category ranks second; however, it falls below NATURAL category in the other two studies. WAR category occupies second place according to Charteris-Black's (2004) study which did not differentiate between specific countries; nevertheless, it is ranked lower than MECHANICAL category when describing European countries specifically. Generally, DISEASE and NATURAL categories consistently rank among the top three positions while MECHANICAL category tends to fall within one of the lower two or three positions.

According to Arrese and Vara-Miguel (2016, p. 141), 'the use of economic metaphors' in crisis-related news is 'very uniform across countries and media', regardless of factors such as 'country of origin, type of newspaper, and economic conditions' and is consistent with 'economic journalism elitist views'. However, when comparing the selected data on China in this research, notable differences emerge. For instance, there are distinct disparities in metaphor categories related to DISEASE and MECHANICAL. While Western countries are portrayed as suffering from a severe disease, the Chinese economy is depicted as undergoing a powerful mechanical process. The description of the Chinese

economy predominantly employs metaphors from the ORGANISM category that encompass various metaphorical expressions and source domains denoting complexity (Arrese, 2015, p. 29). In contrast, European Union and other countries' descriptions exhibit similar distributions between NATURAL and ORGANISM categories with an emphasis on metaphors from NATURAL and WAR categories. Compared to the ORGANISM category, NATURAL metaphors may provide clearer framing for discussing 'crisis' 'in public discourse' (Arrese, 2015, p. 29). Additionally, both DISEASE and NATURAL metaphors might conceptualize European economies as out of control and caused by natural phenomena or disasters that government can do nothing to prevent it. Additionally, DISEASE and NATURAL metaphors suggest that European economies are perceived as uncontrollable outcomes caused by natural phenomena or disasters beyond government intervention; meanwhile, WAR metaphors 'which were dominant in western business media discourse' evoke images of intense rivalry among European economies (Ng 2018; Koller 2005). Furthermore, JOURNEY metaphors exclusively manifest in the depiction of the Chinese economy, while SPORTS & ENTERTAINMENT metaphors, commonly employed to describe Western European countries, rarely emerge in the portrayal of the Chinese economy.

Consequently, within the 3Ts measurement (Type, Tell and Tone) of metaphors discussed in Section 1.4, it can be inferred that the general Type and Tone framed by the metaphor categories in terms of animate/inanimate and 'positive/negative polarity' (Charteris-Black, 2004, p. 33) could be deduced. However, a detailed qualitative analysis is required to indicate the specific way of Telling in metaphors. It can be observed that the metaphor categories employed to describe China are largely similar to those used for EU countries with two exceptions: JOURNEY (16.6%) and SPORTS & ENTERTAINMENT (3.8% and 9.9%). If solely assessed based on these 'dominant' metaphor category types alone (Charteris-Black, 2004, p. 84), descriptions of the Chinese economy exhibiting around a 10 percent difference compared to other countries may not significantly disrupt ideological uniformity across global media platforms. However, there exist disparities or near-opposites in terms of rankings and distributions within these categories which reveal some extent of 'diversity' in ranking within dominant framing (Arrese, 2015, p. 23). Furthermore, the Chinese economy is depicted as powerful, intricate, and progressing on a journey with minimal hindrance from nature, conflicts or disease. This portrayal presents a more favorable tone compared to EU countries as found in previous studies. However, the prevalence of inanimate/mechanical metaphors may indicate a detached stance of journalists with less sympathy and concern as well (Bickes *et al.*, 2014, p. 440).

Nevertheless, the contrasting rankings observed alongside powerful economic imagery conveyed through narration and positive tonality suggest that China is generally depicted with a positive attitude stemming from overarching metaphorical frameworks. Nevertheless, before drawing hasty conclusions, a more detailed analysis focusing on specific metaphor types is required. In subsequent sections, following Charteris-Black's (2004) and Arrese and Vara-Miguel's (2016) approach, the most frequently employed metaphors within different categories were further quantitatively analyzed and qualitatively illustrated through examples along with explanations.

4.2.2 Ten Most Frequent Metaphors Used to Depict the Chinese Economy

The ten most frequently occurring metaphors out of the 76 identified types, used to depict the Chinese economy, are presented in Table 10 below. These metaphors exhibit varying frequencies and percentages (Ratio in the table). The examples provided highlight the source domains through bolded words. It is worth noting that certain metaphors may share equal frequencies. For instance, both CHINESE ECONOMIES ARE MACHINES and CHINESE ECONOMY IS LOCATION appear eleven times within the selected economic news articles. To determine their ranking order, an additional criterion called 'range' has been incorporated into the evaluation process for this table. Here range refers to the 'Range tool' in AntConc, which counts how many articles contain a specific searched word within the selected twenty articles. A higher range value indicates wider usage of a metaphor in news articles. Consequently, since the MACHINES metaphor appears in seven news articles while LOCATION appears in six, it can be concluded that MACHINES is more widely employed. Hence, the ranking of MACHINES surpasses that of LOCATION as listed in the table below.

Table 10 Ten most frequent metaphor types in describing Chinese economy
(Frequency: F, Range: R, Ratio in metaphors describing Chinese economy)

SOURCE DOMAINS and metaphor categories	Frequency(F), Range(R), Ratio (percentage)	Examples with Metaphorical Words in Bold
1. PHYSICAL PROPERTIES (MECHANICAL)	F=76 R=10 21.2%	In China's biggest cities, such as Beijing, Shanghai, Shenzhen and Guangzhou, prices did rise ... (C3)
2. CONTAINER (MECHANICAL)	F=22 R=8	... local governments are filling their coffers by selling land to developers or to the "urban

	6.1%	investment vehicles” they sponsor. (C3)
3. SELF-PROPELLED MOTION (ORGANISM)	F=20 R=9 5.6%	Mr. Cai believes China has already reached this “Lewisian turning-point” and that its arrival can be seen in more assertive works and wage rises. (C4)
4. LANDSCAPE WE MOVE THROUGH (JOURNEY)	F=14 R=7 3.9%	These and other key questions were frequently asked of the Chinese economy over the past year . (C13)
5. PEOPLE (ORGANISM)	F=13 R=7 3.6%	One view, which the company favors, is that Alibaba’s reaction demonstrates its underlying integrity . (C19)
6. MACHINES (MECHANICAL)	F=11 R=7 3.1%	The economy, which has been fuelled by huge government cash injections as well as by property and stock market bubbles, will cool. (C10)
7. LOCATION (JOURNEY)	F=11 R=6 3.1%	No doubt, but it emerged at a time when Alibaba’s broader business prospects have seemed to be dimming. (C19)
6. JOURNEY (JOURNEY)	F=11 R=2 3.1%	If wages continued to rise at this pace, it would mark a hairpin turn in China’s labor market. (C4)
9. PLANTS (ORGANISM)	F=10 R=7 2.8%	At the moment bit structural shifts, such as the growth of China and India, are influencing prices less than one might think. (C18)
10. LIQUID (NATURAL)	F=10 R=6 2.8%	Eventually, Chinese cars will flood into American and European markets. (C14)
Total	F=198 R=20 55.6%	

The table above illustrates the ten most frequently used metaphors in the selected twenty articles, which are PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, LANDSCAPE WE MOVE THROUGH, PEOPLE, MACHINES, LOCATION, JOURNEY, PLANTS and LIQUID. These metaphors appear a total of 198 times across all twenty news articles and account for more than fifty percent of all metaphors (with a total concordance hit of 356) describing the Chinese economy. They represent the ‘dominant organizational metaphors’ (Rhodes and Garrick, 2002, p. 90) that can serve as ‘authentic discourse or powerful signifiers of knowledge at work’ (Rhodes and Garrick, 2002, p. 87). Among them, MECHANICAL metaphor category includes three

types: PHYSICAL PROPERTIES, CONTAINER, and MACHINES, which together make up 30.3% of occurrences among the most frequent metaphor types. ORGANISM category includes three types: SELF-PROPELLED MOTION, PEOPLE, and PLANTS, accounting for 12%. JOURNEY category also consists of three metaphor types: LANDSCAPE WE MOVE THROUGH, LOCATION, and JOURNEY accounting for 10.1%. In terms of percentage distribution in descriptions, the occurrence rate of MECHANICAL category metaphors is higher than that of ORGANISM metaphors. This trend aligns with economic discourse where “biological metaphors were gradually replaced by machine-based metaphors in the new industrial conditions” (Charteris-Black, 2004, p. 136; Smith 1979). The economy is conceptualized as ‘machines’ exhibiting the ‘speed of an engine’ (Charteris-Black, 2004, p. 136). In addition, “inanimate metaphor systems highlight the unpredictability” of economic processes (Charteris-Black, 2004, p. 249).

Furthermore, the categories of WAR and DISEASE do not exhibit any frequent metaphors, while the NATURAL category only encompasses a single metaphor type in Chinese economic descriptions. This deviation from other studies on economic metaphors is noteworthy. In previous research, WAR (Skorczynska and Deignan 2009; Joris *et al.* 2014), NATURE (or NATURAL DIASTER, CATASTROPHE, NATURAL PHENOMENON) (Álvarez-Peralta 2014; Bounegru and Rorceville 2011; Lizcano 2008), and DISEASE (or HEALTH, SICK PERSON, TREATMENT, ILLNESS MECHANICS) (Pühringer and Hirte 2013; Silaski and Durovic 2010; Steinert 2010; Arrese and Vara-Miguel, 2016; Arrese, 2015) consistently emerge as the most frequently identified metaphors.

The WAR metaphor, which symbolizes overt antagonism or conflicts among various metaphor types, is commonly and frequently employed in economic discourse (Gao 2016; Mouton 2019). It holds a prominent position in Skorczynska and Deignan (2006)’s study on analyzing economics metaphors in business newspapers and magazines, including *The Economist*. However, it is intriguing to note that the WAR metaphor does not feature among the top ten most frequent metaphors used to describe the Chinese economy. Furthermore, other metaphor types representing concepts of conflicts or clashes are also absent from Table 10 above. Nevertheless, CONFLICTS take precedence in Charteris-Black’s “overview of conceptual metaphors of financial reporting” (Charteris-Black, 2004, p. 141) within *The Economist*. Additionally, activities involving CLASH such as COMPETITION (Orts and Rojo 2009; Rojo and Orts 2010) or GAMES (Gao 2016; Joris *et al.* 2014; Pühringer and Hirte 2013; Soddemann 2013) frequently appear in their respective studies. Moreover, the concept of HUNTING or ANIMALS

(Skorczynska and Deignan, 2006, p. 93) which may be associated with seizing or greediness, is also absent from the list. In terms of living organisms, the only frequently utilized metaphors are PLANTS ones that convey a sense of tranquility and serenity. In describing the Chinese economy metaphorically, metaphorical expressions like *growth* or *wither* are employed to map concepts from the source domain of PLANTS onto the target domain of ECONOMY. These expressions do not reveal interactions or frictions between different countries or groups. Plants may also signify growth; hence they can be perceived as something positive when compared to concepts related to wars or conflicts.

Furthermore, it is noteworthy that the ten most prevalent metaphors identified in this study do not include concepts in relation with DISEASE and TREATMENT as in Silaski and Durovic (2010) or DISASTER as observed in previous studies in relevant field (Charteris-Black 2004; Lederer, Laranetto and Brown 2017; Álvarez-Peralta 2014; Steinert 2010; Bounegru and Rorceville 2011; Bickes 2014). Similarly, the metaphorical descriptions of economic crises in European economies during the Greek, Spanish, and Italian crisis periods (Bickes *et al.*, 2014, p. 439-440) frequently employed DISEASE-related imagery (Arrese and Vara-Miguel 2015, 2016, 2021; Joris *et al.* 2014; Lizcano 2008; Steinert 2010; Wang *et al.* 2013) but are conspicuously absent from the top-ranked metaphors discussed here. This suggests that economic situations in China are portrayed as such that the crisis has not brought serious *sickness* or *injury* on the body of Chinese economy. Moreover, there are few explicit mentions of economic *recovery*. Harms caused by the financial crisis and indications of an economic depression remain nearly invisible within these commonly used metaphorical depictions. Chinese economy is growing despite encountering its own set of challenges and goes on its journey with its own obstacles.

Thus far, the ten most frequent metaphor types employed have depicted China as embodying a more detached ideological standpoint while simultaneously maintaining a positive disposition towards its economic progress, consistently aligning with the overarching metaphorical categories discussed in the preceding section. However, to comprehensively analyze the comments on ideology and power conveyed through these metaphors, specific examples need to be provided in the qualitative analysis and compared with metaphors depicting the American economy in the discussion/conclusion chapter. The subsequent section will present a detailed qualitative analysis of each metaphor type among the top ten, accompanied by relevant examples. Additionally, following Arrese and Vara-Miguel (2016, p. 155) and Chow (2010, p. 168), Table 11 below summarizes the lexical items of metaphor expressions identified within these frequently employed

metaphor types in my linguistic data.

Table 11 Ten most frequent metaphor types and metaphorical expressions in describing Chinese economy

Metaphor types	Lexical items
1. PHYSICAL PROPERTIES	<i>fall, rise, central, big, giant, vast, boom, increase, over, heart, high, large, huge, enhance, expand, deep, hefty, little, minimum, promote, raise, shortfall, volumes, wide, short of, string, level, ground, low, high, small, drop, up, peak,</i>
2. CONTAINER	<i>islands of, into the pool of, amid a/the sea of, internal, coffer, mix, bulk, enclave, short term, in the year/ five years/ April/ 2011/ the first week</i>
3. SELF-PROPELLED MOTION	<i>slow pace, soft-landing, reach, arrival, briskly, fast, run, stuck, at this pace, soaring, rapidly evolve, terrific pace, a long way, keen to cross the tracks to a new home, impose new curbs, at one point</i>
4. LANDSCAPE WE MOVE THROUGH	<i>so far, since mid-April according to the Beijing Times, over the past year, long before, ever since, at a time, at the moment, last year, this year, 3 years earlier, ten years ago</i>
5. PEOPLE	<i>complain, manipulator, face challenge, wait for, look abroad, reaction, integrity, experience, have money, fill</i>
6. MACHINES	<i>fuel, operate, resilience, adjustment, strike, clash</i>
7. LOCATION	<i>emerge, support, sustainable, remain, on, buttress, forthcoming, mark, broke</i>
6. JOURNEY	<i>go back a long way, meet the sea, over the cliff, there is not a beach but a cliff, hike, enter, last long</i>
9. PLANTS	<i>grow (including all forms of grow), growth</i>
10. LIQUID	<i>flood, erode, freeze, water, surge, cool, squeeze</i>

4.2.3 Qualitative Analysis of the Ten Most Frequent Metaphor Types

This section presents a qualitative illustration of the ten most frequently used metaphors, each accompanied by two representative examples. They are meticulously illustrated and discussed to explore how China's economy is framed through metaphorical descriptions in economic news discourse, thereby revealing underlying attitudes conveyed by such descriptions. The ten most frequent metaphor types identified include PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, LANDSCAPE WE MOVE THROUGH, PEOPLE, MACHINES, LOCATION, JOURNEY, PLANTS and LIQUID. These examples are presented in accordance with their frequency order as stated in section 4.2.2., while being labeled with their respective metaphor mapping formulae

alongside the news article numbers they belong to within the corpus. It should be noted that I have adopted Lakoff *et al.*'s (1991) approach where basic level metaphor types are denoted using uppercase letters for their names or formulas, whereas lowercase letters signify sub-metaphor types. A similar analytical framework has been employed when qualitatively analyzing frequent metaphor types describing the American economy in Section 5.2.3.

PHYSICAL PROPERTIES metaphor

Example 1. Stephen Green of Standard Chartered reckons that prices of new homes *fell* by *over* 20% on average in the first week of May in Beijing, Shanghai and Shenzhen, although he cautions that this may reflect the mix of homes on offer, as developers keep their best properties off the market for now. [ECONOMIC PROPERTIES ARE PHYSICAL PROPERTIES] (C3)

The most prevalent type of metaphor observed in the data pertains to PHYSICAL PROPERTIES. It is not surprising that the Chinese economy experiences fluctuations, characterized by ups and downs or changes in size or scale during the 2008 economic crisis, given its susceptibility to global influences. Metaphors aid in conceptualizing economic phenomena as ‘vertical and horizontal’ changes have been recognized and explained by numerous ‘economists and linguists’ (Smith 1995, Lopez-Maestre 2000, Charteris-Black and Ennis 2001; Venuti and Vaghi 2003; Jakel 2003; Chow, 2010, p. 110). However, employing the metaphor of PHYSICAL PROPERTIES may obscure the role of agents who shape economic conditions by focusing solely on ‘outcomes’ such as ‘rising or falling prices’ rather than delving into the underlying ‘processes’ or specific measures employed for economic control (Charteris-Black, 2004, p. 138). This use of metaphor has potential implications for inducing ‘anxiety’ ‘based on writer perceptions’ (Charteris-Black, 2004, p. 138).

The metaphorical expression ‘*fell*’ in the given example follows the metaphor formula ECONOMIC PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY - Amount is Verticality (Lakoff *et al.*, 1991, p. 14). The sentence describes a decrease in prices. The usage of ‘fell’ and ‘over’ metaphorically portrays the economic property of price amount as something that can descend from a higher position. The concept of verticality is mapped onto the target concept of price amount, resulting in the mapping ‘Amount is Verticality’. This vividly illustrates that the price amount is diminishing rapidly. According to Lakoff (1980, p. 17) GOOD IS UP and BAD IS DOWN

are primary expressions of verticality, with MORE IS UP and LESS IS DOWN being commonly used to describe Chinese economy (Chow, 2010, p. 201). However, not all instances described using upward concepts within news articles about Chinese economy convey positive implications when considered within their respective contexts. For example, in “With the ageing of the Chinese workforce that premium may *rise* [AMOUNT IS A PHYSICAL PROPERTY]” (C4), it represents negative news for factory owners and foreign investors who will have to increase payments to hire young workers due to an aging workforce in China. Therefore, here ‘rise’ does not signify something good. Metaphorical expressions conveying meanings such as ‘rising’ or ‘falling’ occur frequently throughout the dataset indicating fluctuations experienced by Chinese economy during crises periods. Nevertheless, similar to the aforementioned *rise* example, when these metaphors are associated with news context, they cannot be evaluated to describe Chinese economy as positive or negative simply from calculating how many times the metaphorical descriptions with the meaning of UP or DOWN appear. This diverges from Chow’s (2010, p. 202) assessment that an upward description signifies economic improvement since even if there is an increase in negative economic situation it would still be unfavorable regardless of the magnitude. Only when positive economic conditions are linked with UP metaphors can a positive depiction of the economy be observed. The same applies to DOWN concepts but in an opposite sense.

Example 2. At the moment big structural shifts, such as the growth of China and India, are influencing prices less than one might think. The two Asian *giants* are demanding more food (and more types of food), but so far their own farmers have largely satisfied that, so they have not needed to trade much (though that would change dramatically if China were to import wheat this year). [ECONOMIC PROPERTIES ARE PHYSICAL PROPERTIES] (C18)

The abstract concept such as AMOUNT or VALUE of economy is typically represented as measurable through concrete physical properties like ‘SIZE, DEPTH, VERTICALITY, CENTRALITY or WEIGHT’. For instance, metaphorical expressions such as ‘*vast, giant, deep, rise, fall, central* and *hefty*’ are identified in the corpus (refer to Table 11 in Section 4.2.2). In Example 2 China is compared to be one of the Asian ‘giants’, adopting the mapping of ‘Importance is Size’. China is likened to ‘a living being of great size’. This aligns with Lakoff and Johnson’s notion that the salient feature of big SIZE maps onto the sub target domain of IMPORTANCE/SIGNIFICANCE within the metaphor type of PHYSICAL PROPERTY, as in “He is a *giant* among writers. [SIGNIFICANT IS

BIG] (2003, p. 50). As mentioned in Section 2.3.2, this study does not distinguish between traditional personification and metaphor since personification is considered as a multifaceted process referred to as ‘personification metaphor’ in cognitive metaphor theory (Lakoff and Johnson, 2003, p. 32, p. 62). The aspects of size and importance pertaining to a person are highlighted in the description (Lakoff and Johnson, 2003, p. 34). By evoking an image of *giant*, it becomes easier for readers to draw attention towards concerns that China’s substantial food consumption may pose a significant potential threat to food crisis prevention rather than attributing it solely to the impact caused by the subprime crisis mentioned in the news text. The crisis has led to a decline in dollar value which further exacerbated global food crises.

The examples illustrate the fluctuating nature of the Chinese economy, which cannot be exclusively characterized as either positive or negative based on the frequency of UP or DOWN metaphors used. These metaphors encompass both positive and negative aspects. However, China is portrayed as a potential future threat to food security due to its large population, which may elicit concerns and apprehension, although thus far farmers in China have made significant contributions towards ensuring food sufficiency.

CONTAINER metaphor

Example 1. He concluded that “over the greater part of Asia, labor is unlimited in supply.” *Islands of capitalism* existed *amid a sea of* subsistence labor.... But eventually, the economy would reach a turning-point. The capitalist enclaves would reach so deeply *into* the country’s *pool of* labor that the remaining supply of farmers, traders, dockworkers and bag-carriers would fall short of demand. At this point, the economy could not grow without wages rising. [SHAPES ARE CONTAINERS] (C4)

The use of phrases ‘*sea of*’ and ‘*pool of*’ in this example appears to connote the water-related concept associated with the LIQUID metaphor. However, these expressions utilize the shape of a sea or pool to exemplify the presence of a substantial labor force in Asia, particularly in China, rather than describing how liquid is flowing. Therefore, these metaphorical expressions belong to the metaphor SHAPES ARE CONTAINERS instead of LIQUID metaphor. As Chow (2010, p. 47) argues that words and phrase do not necessarily adhere to fixed metaphor categorizations, it becomes more evident that the CONTAINER metaphor is prominent with word ‘amid’. Here both concepts of ‘*sea*’ and ‘*pool*’ are endowed with boundaries of CONTAINER to convey China’s abundant labor force. Nevertheless, from the linguistic context it can be inferred that this situation may not be

sustainable in the long run and could necessitate an increase in wages. While rising wages can prove advantageous for individual workers, they might potentially impede China's consistent economic development due to a scarcity of inexpensive labor force. Thus, this combination reflects both the advantageous aspect derived from having a large labor force as well as potential drawbacks for future sustainability.

Example 2. Alibaba's *internal* [COMPANIES ARE CONTAINERS] investigation attributed the fraud to "the pursuit of *short-term* [(BOUNDED) TIME IS A CONTAINER] financial gain at all cost" by salespeople and others. (C19)

In economic discourse, CONTAINER metaphors are conventional and widely used (see Soddemann 2013; O'Mara-Shimek *et al.* 2015; Orts and Rojo 2009; Soddemann 2013). Example 2 encompasses two CONTAINER metaphors - COMPANIES ARE CONTAINERS and TIME IS A CONTAINER (bounded) (Lakoff and Johnson, 2003, p. 60). In the first metaphor, the Chinese company Alibaba is compared to a container with defined boundaries, suggesting that its investigation is limited within this confined space. This metaphor may not present a favorable image of Alibaba, as it implies that the investigation is not open or transparent. Throughout the data, companies, banks, and governments are frequently represented metaphorically as containers. For instance, in the example provided in Table 10 in 4.2.2, it was stated that 'Banks have expanded their mortgage-books briskly; local governments are filling their *coffers* by selling land to developers or to the "urban investment vehicles" they sponsor.' [INVESTMENTS ARE CONTAINERS FOR MONEY] (C3). Here, the action of local governments earning money is vividly highlighted by comparing it to filling a *coffer* or storage container with money greedily.

In the context of TIME IS A CONTAINER (bounded), the metaphor is employed to depict economic time as having defined limitations and a clear extent. This conceptualization assigns distinct boundaries to the notion of TIME, aligning with Lakoff and Johnson's assertion that humans have an inherent tendency to 'impose boundaries' even in cases where there are 'no natural physical' demarcations, such as in the concept of TIME itself (2003, p. 29). This 'act of quantification' reflects financial reporters' desire to present themselves as knowledgeable analysts capable of predicting economic processes with some level of 'certainty' (Charteris-Black, 2004, p. 135). By employing this metaphor, they aim to perceive, quantify, or comprehend trends and developments in the economy. For instance, within this dataset, numerous instances where the TIME IS A CONTAINER

(bounded) metaphor is utilized. One example highlights China's rapid economic growth by stating that '*In five years* China, which already accounts for a tenth of global demand for luxury goods, is predicted to be the third-largest market for them' (C9). This illustration builds a positive image of China's rapid economic growth that is being able to afford large demand of global luxury goods within a limited timeframe.

The metaphorical portrayal of China using CONTAINER metaphors includes both positive and negative depictions. In Example 1, the abundant supply of labor force in China is likened to a vast *pool* or *sea*, which effectively bolsters Chinese economic development; however, concerns arise regarding its long-term sustainability. In the second set of examples, the renowned Chinese company Alibaba and its salespeople are depicted unfavorably, and with suggestions that government officials may be pocketing money. Nevertheless, it is acknowledged that the Chinese economy has experienced rapid growth within a limited timeframe.

SELF-PROPELLED MOTION metaphor

Example 1. And although sales will rise in China, the *pace* will *slow* [ECONOMIC ACTION IS SELF-PROPELLED MOTION]. (C10)

The example sentence suggests that housing sales in China will initially increase at a rapid pace, but eventually 'slow down' (Chow, 2010, p. 46). In this context, the speed of economic progress, represented by the selling of houses, is metaphorically described as the speed of motion towards a destination. Furthermore, the manner in which economic progress occurs is depicted as a slow-paced motion. These metaphors align with the overarching conceptual category that views ACTION IS SELF-PROPELLED MOTION (Lakoff *et al.*, 1991). Notably, concepts such as speed and efficiency play a crucial role in assessing economic quality (Chow, 2010, p. 106). While it is encouraging to observe significant and swift advancements in the Chinese housing market's progress initially, there may be an eventual deceleration.

The background context of the example illustrates that the outlook for the housing market in 2011 appeared unpromising, with declining sales observed in countries like Japan and Europe. If the Chinese housing market was progressing during this period, it could have presented a stark contrast to the sluggish economies of other countries' housing markets. However, considering that its *pace* would eventually decelerate, this strong contrast may gradually become less apparent.

Example 2. Economists will continue to debate China.... Can the government manage a *soft-landing*? [ECONOMIC ACTION IS SELF-PROPELLED MOTION] (C13)

The metaphorical comparison in this example likens the Chinese government's management of economic inflation to the careful manner of an airplane's soft-landing. It suggests that the action of controlling the economy should be approached with caution, similar to managing a flying machine for a smooth landing. This specific sub-case, referred to as 'Careful Action is Careful Motion', falls under the metaphor type of ECONOMIC ACTION IS SELF-PROPELLED MOTION (Lakoff *et al.*, 1991, 27). By emphasizing the importance of careful management akin to achieving a soft landing, it raises concerns regarding the sustainability of China's economic development. Furthermore, it prompts inquiries and implies that inadequate governance may lead to a hard landing and potential collapse of the economy.

In the metaphor of SELF-PROPELLED MOTION, the initial example illustrates a positive increase in the housing market, although its rapid pace may not be sustained continuously. The second example exhibits a skeptical stance towards future prospects. It is unsurprising to observe frequent utilization of SELF-PROPELLED MOTION metaphors in depicting how the Chinese economy has adeptly adapted itself amidst various economic fluctuations. This adaptability can be attributed to countries being influenced by economic and financial crisis, as they respond accordingly.

LANDSCAPE WE MOVE THROUGH metaphor

Example 1. In Tongzhou (a Beijing suburb), prices have fallen by 13.4% *since mid-April*, according to the *Beijing Times*. [TIME IS A LANDSCAPE WE MOVE THROUGH] (C3)

The metaphor of LANDSCAPE WE MOVE THROUGH may be considered one of the most covert and conventional metaphors among the frequently employed metaphors in this study. It conceptualizes the intangible and abstract notion of time as quantifiable 'in lengths' (Lakoff, 1991, p. 77), akin to tangible landscapes that can be observed and measured, such as being described as 'a short/long period of time' (Lakoff, 1991, p. 77). The selected example sentence is derived from a news article discussing the performance of the Chinese housing market during the post-mortgage-crisis period. The article places significant emphasis on the concept of time throughout its content. In this sentence, 'since'

denotes ‘in the period after a specified time in the past’ (see <https://www.merriam-webster.com/dictionary/since>), thereby indicating that time possesses measurable duration. From its outset, this news piece profiles ‘China’s economy can survive’ (C3) which has thrived considerably, exemplified by soaring housing prices in Tongzhou—a suburb of Beijing—China’s capital city. However, through employing ‘since’ it subtly underscores ‘mid-April’ as a specific temporal reference point from which concerns arise regarding potential adverse effects on both ‘China’s economy and the countries sell to it’ (C3). Consequently, this implies that the current prosperity may be short-lived and raises doubts about long-term prospects within the housing market through an implicit metaphorical representation of time.

Example 2. Across the country as a whole, home prices are nine times the average income of urban households. But China's property market does not yet serve the average household, ... If the first customers were also the richest, then China's property market has *so far* served only the top 20-30% of households. [TIME IS A LANDSCAPE WE MOVE THROUGH] (C3)

TIME is a pivotal concept intricately linked to economic trends and crises, encompassing the notion of decisive moments. Charteris-Black (2004, p. 135) contends that financial reporters aspire to ‘predict economic processes’ with ‘certainty’. Hence, time measurement plays an integral role in describing the economy and should not be disregarded in analysis. However, due to its abstract nature, it becomes necessary to compare time as a quantifiable physical distance for enhanced comprehension by individuals. In the second example, China’s property market’s timeframe for serving households is depicted as a landscape that can be gauged as ‘far’ or ‘near’. This observation suggests that despite apparent economic prosperity, China’s housing market has not achieved homogeneous development over this considerable temporal span. It may have undergone a process but still requires substantial progress to cater not only to the wealthiest families but also to average households. Nevertheless, such an evaluation indicated by *so far* implies that there remains approximately 70-80 percent untapped potential in China’s property market.

PEOPLE metaphor

Example 1. China, India, Brazil and Russia *complain* that they do not get the respect they deserve. Here is a chance for them to earn it by helping underwrite a global public

good. [COUNTRIES ARE PEOPLE] (C18)

Example 2. Mr. Obama may formally declare China a currency *manipulator* soon.
[COUNTRIES ARE PEOPLE] (C1)

The most used metaphors in the domain of PEOPLE to describe the Chinese economy are COUNTRIES ARE PEOPLE (6 occurrences). In these examples, China is portrayed as a person with opinions and *complaints*, capable of *manipulating* currency. These metaphors resemble THEORIES ARE PEOPLE and MACHINES ARE PEOPLE from Lakoff's List (Lakoff *et al*, 1991, p. 113, 181). While adding vividness to descriptions, using such metaphors may also serve 'a persuasive function' (Charteris-Black, 2004, p.7). Rather than identifying specific officials or leaders responsible for complaining or manipulating the economy within China, these metaphors construct an image of the country. 'The conceptualization of the country as a person' (Charteris-Black, 2004, p. 75) may give readers the impression that all people in this country engage in complaints or attempt to manipulate economy; no one in this country is an exception. The images created by these two metaphors - complainer and economic manipulator that China forms seem not positive. The second example implies that Mr. Obama did not hold favorable views towards China during his statement, indicating tension in the relationship between America and China. Consequently, the PEOPLE metaphor portrays China not as a helper or contributor to the global economy during the worldwide economic recession caused by the crisis, but a complainer and manipulator. It is advised to earn respect by actively contributing to global public good instead of solely complaining.

MACHINES metaphor

Example 1. Like Japan then, China today has a strong demand for housing, *fueled* by fast growth and rapid urbanisation, and a tolerable exposure to debt. [COUNTRIES ARE MACHINES] (C3)

MACHINES metaphors are frequently employed in economic newspapers to depict the functioning of economies (see Horner 2011; Esager 2011; Porto 2012; Rojo and Orts 2010; Arrese 2015; Arrese and Vara-Miguel 2016; Bickes 2014). PEOPLE ARE MACHINES is listed in Lakoff *et al*. (1991, p. 191). In this example, China is portrayed as a well-oiled machine or engine, with its robust housing demand experiencing rapid growth *fueled* by gasoline or other energy sources. This portrayal presents a powerful and positive

image of the economic process (Charteris-Black, 2004, p. 72), which sharply contrasts with other countries experiencing recession in their mortgage sectors during the crisis period. While many nations worldwide are grappling with ‘financial repression’ and stringent regulations along with ‘austerity’ measures following the American mortgage crisis (Power, Ali and Lebdušková, 2019, xix.), China’s housing market remains comparatively prosperous as described by the MACHINE metaphor ‘*fuelled* by growth and rapid urbanisation’. However, through the use of ‘expose’, it implies that tolerating debt in economic behavior can be likened to exposing oneself to danger or risk. It is also indicated in the sentence that China is like Japan then that the real estate market would finally decline. Thus, tolerating more debt in the Chinese housing market might be risky—highlighting hidden boldness within this energetic MACHINE metaphor—and could potentially lead to economic concerns. Charteris-Black points out that the use of ‘inanimate/ mechanical tone’ emphasizes ‘unpredictability’ within ‘economic processes’ in the distanced ‘positioning’ of text producers while also associating it with ‘negative evaluation’ (2004, p. 135-137, 249). Nevertheless, ‘metaphor use is not deterministic’ (Charteris-Black, 2004, p. 249). The MACHINE metaphor used here conveys positive tone construing a powerful image of Chinese economy. However, in light of contextual background statement, the overall tone may not be entirely optimistic.

Example 2. The recovery in shipping in the first half of 2010 took many in the industry by surprise, as China’s *resilience* was buttressed by growth in parts of Europe—particularly in poorer countries such as Russia and Turkey—and in America. [COUNTRIES ARE MACHINES] (C17)

Resilience refers to the capacity of ‘an elastic material, such as rubber’ or a spring, to ‘absorb and release’ energy as it returns or ‘springs back to its original shape’ (see <https://www.merriam-webster.com/dictionary/resilience>). The term originates from the Latin verb *resilire*, meaning to recoil. The word prominently features the concept of rebounding or returning to original shape, and it can be viewed as “analogous to person’s ability to bounce back after a jarring setback”. While resilience is often discussed in relation to human characteristics, its fundamental meaning focuses on size or shape and can also be applied to describe animal tissue. Therefore, it is not exclusive to humans.

In this study, drawing upon Lakoff *et al.*’s metaphor of The Changeability of a Belief is the Resilience of the Object (1991, p. 104), which considers resilience in terms of objects, materials, or mechanical devices such as rubber or coil springs and compares the

changeability and adaptability of an abstract spiritual statement to the ability of a concrete object to return to its original shape as, China's *resilience* can be likened to that exhibited by machinery parts possessing spring-like properties enabling them to rebound after setbacks. Instead of 'portraying the country or its government decisions' as emergency measures 'necessitated by crises' akin to 'mechanical failures' (Arrese, 2015, p. 24), the MACHINES metaphor here depicts an active economic scene in China. In this example scenario, China is not depicted as a nation whose economy is adversely affected by the American mortgage crisis. Moreover, the reason why China could have a rapid recovery is due to the help from America and other countries. Here the sentence involves the interconnection between different economies. However, not all MACHINES metaphors describing various perspectives of Chinese economy during the crisis are active and positive. For instance, in 'Alibaba, China's leading e-commerce platform, faces the same challenge, but more so. It *operates* in a country where fraud is rife.' [COMPANIES ARE MACHINES] (C19), the word *operates* metaphorically portrays 'an economy as an engine or machine' (Chow, 2010, p. 106). In this sentence, the leading Chinese firm Alibaba is depicted as a machine that *operates* within the country of China where fraud is prevalent and economic trust seems lacking. Both the company's image conveyed through this metaphor and the country's image portrayed in this context do not evoke positive impressions. It should be noted that Alibaba is not only a local company in China but also an international e-platform; thus, raising doubts about its ability to establish trust among people from different countries for achieving economic success under such a background. The MECHANICAL metaphors present China with both positive and negative imagery. On one hand, the Chinese economy is depicted as a robust and rapidly growing entity driven by a powerful economic engine, capable of resilient recovery. On the other hand, it also portrays an unfavorable and unreliable economic environment in the examples. Moreover, considering the linguistic context, this fuelled economy may encounter risks, while its swift rebound is partially reliant on support from America. These metaphorical descriptions encompass both optimistic and pessimistic tones, indicating that the overall background information is not entirely sanguine.

LOCATION metaphor

Example 1. Trust the dollar.

In exports the most important price signal is the dollar. "The best attainable of industrial policies for sustained development is an undervalued exchange rate," write

Stephen Cohen and Brad DeLong in “The End of Influence”... In this instance they were writing about China and other *emerging* markets, but the same is broadly true of rich countries. [ECONOMIC EXISTENCE IS A LOCATION (HERE)] (C1)

The metaphorical formula employed in this sentence is EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE – EXISTENCE IS LOCATION OUT OF CONTAINER (Lakoff *et al.*, 1991, p. 70), to describe the *emerging* markets. From the usage of *emerging*, it portrays China’s market as an entity that has manifested itself or come into view to become visible from its location or place. The ‘emerging’ markets (C7) include Brazil, China and India within the corpora. China is mentioned six times in this news article, as the aftermath of the financial crisis has led to recurring discussions on ‘economic imbalances in America’, with significant emphasis on ‘borrowing from China’ in their president’s speech (C1). While acknowledging that the Chinese market *always* exists, employing *emerging* suggests that it may not have been previously noticed or acknowledged and suddenly gains prominence or emerges itself to come into focus. This conventional metaphor characterizes countries with strengthening economies as key players who have gradually emerged over time. It implies that China and other emerging markets are being observed rather than acting as observers themselves when demonstrating their strength to the rest of the world. Furthermore, this sentence distinguishes emerging markets from wealthy nations, indicating that for China’s economy to be considered part of the powerful group, further development or a longer period of emergence might be necessary.

Example 2. Economists will continue to debate China.... Are double-digit growth rates *sustainable*? These and other key questions were frequently asked of the Chinese economy over the past year. [ECONOMIC EXISTENCE IS A LOCATION (HERE)] (C13)

The metaphor ‘EXISTENCE IS LOCATION UP HERE - Maintaining Existence is Maintaining Location Up Here’ (Lakoff *et al.*, 1991, p. 70) is employed through ‘sustainable’. According to Merriam-Webster Dictionary, ‘sustain’ denotes providing ‘support’, upholding and prolonging (see <https://www.merriam-webster.com/dictionary/sustain>). It encompasses the notion of supporting the weight of something, which aligns with Lakoff *et al.*’s (1991, p. 70) example: ‘The anti-war movement needs your *support*’. In this particular context, ‘support’ carries the meaning serving as a foundation or pillar that holds up an entity or object. In

Lakoff's example, the 'anti-war movement' is likened to a tangible object requiring support to maintain its elevated position or existence above others. In Example 2, the LOCATION metaphor conceptualizes physical locations as economic states (Chow, 2010, p. 201), wherein LOW STATUS IS DOWN and HIGH STATUS IS UP are represented (Chow, 2010, p. 210). This raises questions regarding whether Chinese economy's 'double-digit growth rates' can be *sustainable* akin to an enduring entity capable of maintaining its location up or existence for an extended period.

China is depicted as a newly emerged key player in the global economy through LOCATION metaphors; however, doubts arise regarding its sustainable growth trajectory. The overall tone remains positive albeit tinged with skepticism.

JOURNEY metaphor

Example 1. "For years, businesses have simply assumed that China has an unlimited supply of young people who can be had for modest wages and replaced at will," Mr. Kroeber writes. The assumption *goes back a long way*. [LONGTERM PRUPOSEFUL ECONOMIC ACTIVITY IS A JOURNEY] (C4)

Journey metaphors have a significant presence in cognitive linguistic research, as evidenced by the extensive body of work (Charteris-Black, 2004, p. 74; Esager 2011; Gao 2016; Orts and Rojo 2009; Rojo and Orts 2010; Skorczynska and Deignan 2006). However, some previous studies fail to differentiate between SELF-PROPELLED MOTION and JOURNEY metaphor. For instance, Gao (2016) analyzes JOURNEY metaphor including metaphorical words like 'barricade' and 'hurdle' to illustrate how 'economic activities are blocked or suspended' (2016, p. 2633). Nevertheless, these concepts fall under the purview of SELF-PROPELLED MOTION metaphors according to Lakoff's List (1991), which posits that obstacles to action are akin to obstacles to motion. An example from Lakoff's work is the sentence 'We faced many *hurdles* in taking on this problem' (Lakoff, 1991, p. 31). This study primarily adhered to Lakoff's (1991) List for the systematic identification of metaphor types. In cases where the metaphor expressions were not found in Lakoff's (1991) List, relevant lists or findings from scholars were consulted for comparison.

Example 1 illustrates a longstanding business assumption that China possesses an inexhaustible supply of young labor by conceptualizing TIME as MOVING BACKWARD. The progress of the assumption is depicted as a distance travelled. According to the news report, these businesses refer to capitalist foreign companies in China such as Honda and

Foxconn, which have established plants and labor-intensive factories there due to the presence of a large and cost-effective labor market.

Example 2. Sir Arthur also pointed out that there was often a gap between the wages paid in the capitalist economy and the subsistence earnings in the hinterland. Where the *islands* of capitalism *met* the *sea* of subsistence labor, there was not a “*beach*”, but a “*cliff*”. To tempt workers *over that cliff*, firms have to pay a premium—fumes subsidies and the like. With the ageing of the Chinese workforce that premium may rise. [LONGTERM PURPOSEFUL ECONOMIC ACTIVITY IS A JOURNEY] (C4)

In Example 2, the concept of “JOURNEY is systematically mapped onto the target domain ECONOMY” (Gao, 2016, p. 2632). The metaphorical use of *over that cliff* illustrates the challenge of enticing workers to remain employed by firms as a journey, with progress depicted through vertical movement. Expressions such as “beach, cliff, met” and “sea” within the context contribute to a comprehensive and systematic depiction of economic activity resembling a journey traversing diverse terrain. ‘The impression of journey’ is often associated with ‘overcoming difficulties’ along the road towards reaching a destination (Gao, 2016, p. 2632). Similarly, in this example, going *over the cliff* signifies that solving this problem is challenging and may require significant effort. Furthermore, akin to Example 1, an aging workforce poses hindrances to Chinese economic development due to foreign capitalist companies like Honda and Foxconn finding it increasingly difficult to meet workers’ expectations for improved economic treatment without offering salary raises. Failing to provide wage increases considering the challenges presented by this JOURNEY metaphor may hinder China’s capacity to attract foreign investment and establish new manufacturing plants, as capitalists can readily relocate to regions with an abundant labor force.

The examples in the JOURNEY metaphor exemplify China’s enduring reputation as a lucrative destination for foreign capitalism to establish factories, owing to its abundant supply of young socialist workers. However, with the aging workforce and their escalating demands for higher wages, despite the continuous growth in labor supply, China may be approaching a juncture where surplus labor is no longer sufficient, which could have unfavorable implications on its economy.

PLANTS metaphor

Example 1. Developments in China are likely to make things worse still for

rich-world companies. China too has a surplus of car manufacturers, excess capacity and a problem with demand. Annual sales *growth* is forecast to fall from 30% to around 10% from this year as other parts of the country follow Beijing's move to restrict the number of cars in the city. [ECONOMY IS A PLANT] (C14)

During the financial crisis, not only the mortgage market but also other industries in countries involved were affected. For instance, the car and food industries were discussed in Section 3.6.2 as being influenced by the crisis. This sentence is extracted from a news article describing the economic situations of American and Chinese car industries during the economic crisis. In this context, 'growth' implies an increase in annual sales compared to being similar to a plant's ability to grow. The plain and literal expression should be 'increase'. By employing the PLANT metaphor, people might perceive a sense of prosperous energy associated with growth. However, development in China is not favorable news as they exacerbate challenges for rich-world companies and hinder growth opportunities for Western firms mentioned in the news regarding selling cars to China. Additionally, although using the PLANT metaphor suggests positive strength through growth, it does not purely describe a positive economy given that forecasted *growth* is expected to decline and sustained *growth* is questioned.

Example 2. Mr. Shih's estimate (not counting the untapped credit lines) would add another 34 percentage points to China's ratio of public debt to GDP. But even then, the burden would be little more than 50% in an economy *growing* at over 10% in nominal terms. China's local governments are no doubt wasting a lot of money. But China's government has a lot of money to waste. [ECONOMY IS A PLANT] (C3)

In this example the metaphor formula 'Development of' Economy 'is Growth of a Plant' (Lakoff *et al.*, 1991, p. 107) is employed. Here it is good news that the metaphorical expression *growth* signifies China's economy evolving akin to the growth of a plant, implying its increasing prosperity and even allowing for extravagant government spending.

Lakoff *et al.* (1991) map concepts such as BELIEFS, THEORIES, and PEOPLE onto the domain of PLANTS to portray them as BEINGS WITH A LIFE CYCLE (1991, p. 107, 112, 191). The notion that THE ECONOMY IS A PLANT holds significant popularity in economic discourse (Chow, 2010, p. 145), with frequent utilization of growth-related concepts in plants (Chow, 2010, p. 108; Charteris-Black, 2004, p. 77) to convey strong positive evaluations associated with fertility and vitality (Charteris-Black, 2004, p. 78). However, this metaphor can be applied to both economic expansion and contraction trends.

Example 1 forecasts a decline in *growth* while Example 2 demonstrates robust economic *growth*. The tones manifested by the metaphors for growth exhibit variation in degree.

LIQUID metaphor

Example 1. China too has a surplus of car manufacturers, excess capacity and a problem with demand. Eventually, Chinese cars will *flood* into American and European markets. [PRODUCTS ARE LIQUID] (C14)

LIQUID metaphor for *flood* can be found in Lakoff *et al.*'s List in "The stage was *flooded* with light (1991, p. 179) to show the fluid feature of the light that it is everywhere on stage. In Example 1, the metaphor expression *flood* implies cars produced in China will be sold into America and Europe in large amount like flood pouring into these countries. On one hand it reveals the powerful production ability of China's car manufacturers, while on the other it may indicate the large number of cars are to be everywhere and becomes threatening like flood in American and European markets.

Example 2. With the ageing of the Chinese workforce that premium may rise... That moment will come, of course. When it does wages will rise, *eroding* the return on capital. [MONEY IS A LIQUID] (C4)

In Lakoff *et al.* (1991), the conceptual mappings of CHANGE, EMOTIONS, LIGHT and MONEY onto the domain of LIQUID have been established (1991, p. 18, 140, 179, 183). Among these mappings, the metaphor MONEY IS A LIQUID is 'widely' recognized (Gibbs, 2018, p. 40) as 'a robust metaphor in economic language' (Lederer, Laranetto & Brown, 2017, p. 1) and frequently employed within economic contexts (Weiner 2011). This vivid metaphorical usage can be observed in the example above where *erode* conveys the notion of wearing away or gradual erosion caused by water or other corrosive liquids. The capital is being described as can be 'eroded' by liquid forces. The metaphor illustrates how increased wages, and an aging workforce could negatively impact return on investment. The original news article suggests that foreign capitalists may completely withdraw from China if they fail to generate sufficient profits and instead seek regions with abundant labor resources. Consequently, unless China's labor market expands again soon enough or experiences significant changes otherwise; this metaphoric representation implies a potentially bleak outlook for the Chinese economy while concealing its current prosperous labor market situation.

Among the two representative instances of LIQUID metaphor, one example signifies China's robust manufacturing prowess during a volatile economic period, while the other exemplifies the adverse impact of rising wages for Chinese workforce on foreign capital.

The ten metaphor types most frequently used to describe the Chinese economy, discussed in this and previous sections, account for over half of the metaphorical expressions that have contributed to shaping different perspectives on the Chinese economy. Following the 3Ts measurement (Type, Tell, and Tone) introduced in Section 1.4, I will now provide a concise summary. The metaphor types need to be further compared with those describing the American economy analyzed in the next analytical chapter; therefore, I will focus on Tell and Tone. By examining *Tell*, analysis in this section reveals the roles played by economic entities such as the country, its government, banks, companies, market, labor force, and overall economy as described in various instances. China is depicted as a significant consumer for food products (PHYSICAL PROPERTIES) and has a strong demand for housing (MACHINES). It rapidly emerges as a major global luxury goods market (CONTAINER). While it used to be perceived as a major supplier of labor force in international markets, this perception is gradually changing (CONTAINER, JOURNEY), leading to *erosion* of returns on foreign capital investments (LIQUID). China is starting to become an influential player in the global market but has not yet joined the ranks of wealthy nations; doubts persist regarding sustainability of its robust economic growth (LOCATION). On a global stage, it tends to voice complaints and may be declared as an economic manipulator. Its rapid development can be observed particularly within real estate sector, but future *pace* might *slow down* (SELF-PROPELLED MOTION), leading to decline in new house prices (PHYSICAL PROPERTIES, LANDSCAPE WE MOVE THROUGH). China's emergence as a productive car producer (PLANTS) poses challenges for companies from developed countries, and large volumes of cars exported to America and EU countries may raise concerns and be viewed as threatening (LIQUID). The Chinese government injects funds into their own coffers *coffer* (CONTAINER) and faces criticism for wasteful spending (PLANTS). The effectiveness of their contributions to economic management is questionable (SELF-PROPELLED MOTION). Its banking sector carries significant risks (CONTAINER). Alibaba, its representative company, has been criticized for prioritizing *short-term* profits (CONTAINER) and *operates* in a country accustomed to fraud. While the economy goes through ups and downs (PHYSICAL PROPERTIES), it generally exhibits robust growth (PLANTS).

The overall *tone* is predominantly positive while portraying Chinese economic growth and development as resilient amidst the global financial crisis that affected many other

countries. However, concerns arise regarding the sustainability of this continuous progress. The metaphorical expressions used depict China as a powerful capitalist nation navigating through an uncertain economic period. Foreign companies benefit from maintaining profits without increasing wages, while real estate continues to generate gains at the expense of borrowers. Nevertheless, neither governments nor banks are explicitly held accountable as ‘responsible social actors’ for effectively addressing domestic economic issues or contributing to sustainable development and global economy (Bickes *et al.* 2014, p. 441). The country and its economy seem to ‘receive less sympathy’ (Bickes *et al.* 2014, p. 433) and its flourishing perspectives are mostly highlighted. This portrayal may suggest a detached perspective on the impact of the mortgage crisis in China, potentially leading to disregard for its hardships during that time (Bickes *et al.*, 2014, p. 427). Similarly, laborers do not receive significant sympathy through metaphors due to their low wages (Bickes *et al.*, 2014, p. 439); however, their substantial numbers are emphasized given their crucial role in both China’s economy and foreign companies’ operations. The examples may also imply a distant stance towards China from America and EU, indicating that some aspects of its economic development might not be perceived as positive news for these countries and their companies, such as the oversupply of cars. And its relationship with America is not described in a friendly way as it is blamed by the US president.

4.2.4 Modifications of Existing Metaphors

In this study, four types of source domains used to describe the Chinese economy were identified in the data, which were not included in Lakoff’s List (1991). These categories include STAGE, BUBBLE, SOUND, and DISASTER. The first type belongs to the ORGANISM metaphor category while the latter three belong to the NATURAL category. These metaphors have been highlighted in green color in Table 7 of Section 4.2.1. It is worth noting that these metaphors represent modifications of existing metaphors rather than novel ones since they involve transferring a metaphor from one domain of economic activity to another. As discussed in Section 3.4.7, it is unlikely that completely new metaphor types exist that have not been previously explored in other CMA studies; instead, my study focuses on modifications of existing metaphors found within more recent research literature due to the passage of time since the publication of news articles included in my dataset and subsequent relevant studies conducted on this topic area over more than a decade ago. Furthermore, these comparatively more recent metaphors are presented here with detailed examples as complementary additions to Lakoff’s List (1991). Although these metaphors do not account for a large proportion of all metaphoric expressions

describing the Chinese economy overall, they still hold significant research value given their potential “more recently in awareness” status (Talmy, 2000, p. 315-316; Croft and Alan, 2004, p. 56), contrasting with earlier information stored ‘in memory’, making them potentially ‘more salient’ (Talmy, 2000, p. 315-316; Croft and Alan, 2004, p. 56; Arrese, 2016, p. 139) and easily identifiable ‘by ordinary readers’ (Arrese, 2016, p. 139). Examples and explanations illustrating these recent metaphors are listed below according to their frequencies within both ORGANISM and NATURAL categories.

STAGE metaphor

Example For another, the adjustment that China needs may be happening but not necessarily according to the *script*. That adjustment is in its real exchange rate, which can occur either through a nominal appreciation or by keeping the yuan unchanged and wages and prices rising faster than in other countries; and there is increasing evidence that this is happening. [WORLD ECONOMY IS A STAGE] (C15)

The metaphorical use of the word *drama* can be classified within the ORGANISM category, as identified in Arrese and Vara-Miguel’s (2016) study, which aligns with the STAGE metaphor type explored in this research. Therefore, it should be noted that this metaphor type represents a modification rather than a novel conceptualization. In their study, drama is employed metaphorically in expressions such as ‘financial *drama*’ (Arrese and Vara-Miguel, 2016, p. 155) and in sentences like ‘The situation in Italy is *dramatic*.’ (Arrese and Vara-Miguel, 2016, p. 146), where financial circumstances are likened to theatrical performances.

In the above example, *script* refers to the written text of a stage play. Written text is characterized by a higher degree of ‘planning’ compared to ‘spontaneous speech’ (Charteris-Black, 2004, p. 87). Stage performers are required to adhere to the written script, which involves various levels of ‘advance preparation’ (Charteris-Black, 2004, p. 87). By employing the metaphorical comparison between the world and a stage and considering each country’s economy as role players on this stage, it can be observed that China deviates from performing or organizing its economic activities in accordance with an established script. Thus, different countries’ economic activities are conceptualized as a drama on stage and thus adopting the sub-metaphor Economic Activity is Drama on Stage. It should be noted that there does not exist an actual economic *script*. This STAGE metaphor indicates that the world economy is like a stage and Chinese economic situations might to some extent surprise global spectators. This STAGE metaphor signifies that the

global economy resembles a stage where Chinese economic conditions may surprise international observers, indicating the text producer's inability to accurately 'predict' future developments in the Chinese economy (Charteris-Black, 2004, p. 72). However, it also highlights the positive aspect of unexpected Chinese economic growth despite being influenced by the crisis.

BUBBLE metaphor

Example Is the Chinese economy a *bubble* waiting to collapse? [ECONOMY IS A BUBBLE] (C13)

The metaphorical expression *bubble* has been previously identified and discussed in the works of Charteris-Black (2004), Slintáková (2010), Chow (2010), Mercille (2014), Arrese (2015) and Arrese and Vara-Miguel (2016). In Charteris-Black's (2004, p. 156) study, it was categorized as a metaphor type called BEHAVIOUR OF GAS. Slintáková (2010) classified it under SPIRALS AND BUBBLES, while Chow (2010, p. 115) associated it with the source domain of BUILDING conceptualized it as an analogy to AN AEROPLANE GLIDING DOWNWARD. The term 'housing *bubble*' specifically related to the housing market, was identified by Mercille (2014) and further explored by Arrese and Vara-Miguel (2016). This 'unique economic metaphor type', referred to as the BUBBLE metaphor, gained prominence in news until recently when Arrese (2021, p. 100) highlighted its significance in describing real estate booms and crashes. Following Arrese's (2021) perspective, I consider this metaphorical expression as a distinct typology rather than merely belonging to any other existing metaphoric type.

In the above case the sustainable development of Chinese economy is being questioned, likened to a fragile *bubble* that lacks stability and may burst. The original news article mentions that the Chinese economy has experienced 'double-digit growth rates' and raises concerns about 'the sustainability of emerging market recoveries' (C13). Therefore, describing the Chinese economy as a metaphorical bubble emphasizes its vulnerability and susceptibility to collapse. Thus, characterizing the Chinese economy as a metaphorical *bubble* underscores its vulnerability and potential for collapse. Despite appearing to thrive post-global crisis, this metaphor implies a lack of substance, suggesting skepticism towards its economic 'outlook' (Charteris-Black, 2004, p. 146).

SOUND metaphor

Example Tongzhou's new flats are one example of the property boom in China, where 1.87 billion square meters of living space were under construction in the first quarter of this year, 36% more than a year earlier. The *boom* has *resonated* widely. [ECONOMIC PROSPERITY IS LOUD SOUND] (C3)

The SOUND metaphor, encompassing *boom* and *booming*, has been identified by Chow as 'originally referred to loud, deep sound' (2010, p. 158). According to Lakoff and Johnson (2003, p. 18), a metaphor can facilitate the 'understanding' a concept only through 'its experiential basis'. Both seeing and hearing are fundamental sensory experiences that can serve as potential sensory foundations for metaphorical concepts. However, while viewable concepts such as SEEING or LIGHT have often been mentioned in previous research like Lakoff's List (1991) or Gao's (2016) study, SOUND metaphor is seldom discussed. Lakoff's List (1991) includes the metaphor GOODNESS IS LIGHT / BADNESS IS DARKNESS. Gao (2016, p. 2620) has argued that LIGHT as an 'essential part of human life is one of the PERCEPTION metaphors used to conceptualize economic activities'. It implies 'good or bad situations of economic development' when 'mapped onto the economic domain'. In this study's data, the LIGHT metaphor appeared twice in 'The mood in China is even *blingier*.' [GOODNESS IS LIGHT] (C9), and 'No doubt, but it emerged at a time when Alibaba's broader business prospects have seemed to be *dimming*' [HOPE IS LIGHT] (C19). Both *blingier* and *dimming* use LIGHT metaphors to express positive outlook for economic entities as good (China-*blingier*) or negative outlook as bad (Chinese firm Alibaba-*dimming*). In my opinion, SOUND metaphors can also "allow us to comprehend one aspect of a concept in terms of another" (Lakoff and Johnson, 2003, p. 10). For example, both *boom* and *resonated* are originally used to describe loud sound or resonance. They may evoke people's perception of prosperous economic conditions like loud and echoing sounds. Similarly, just as light and shade can symbolize good or bad economic situations in LIGHT concepts, loudness and quietness may represent them as well. Thus, the use of SOUND metaphor effectively accentuated the 'strong' and 'positive' indications of economy (Baker *et al.*, 2008, p. 293, 298).

DISASTER metaphor

Example Luxury sales grew 20% even during the industry's *annus horribilis* last year and are forecast to boom by an astounding 30% this year. In five years China, which already accounts for a tenth of global demand for luxury goods, is predicted to be the

third-largest market for them. [INAPPROPRIATE ECONOMIC ACTIVITY IS A DISASTER] (C9)

The metaphor of DISASTER (Charteris-Black 2004; Álvarez-Peralta 2014; Blickes *et al.* 2014; Horner 2011) frequently employed in numerous studies within the realm of economic discourse analysis. It no longer remains a novel metaphor, as it has been acknowledged by more than four other researchers. The boundaries of metaphor concepts are not clear cut. Ungerer and Schmid argue that metaphors exhibit ‘vagueness and openness’ (2006, p. 147), and due to ‘the absence of tangible attributes and the vagueness’ inherent in ‘most conceptual metaphors’, ‘reliable semantic criteria’ for certain metaphor categories are lacking (Ungerer and Schmid, 2006, p. 319). Consequently, the DISASTER metaphor is classified differently such as NATURAL DISASTER (Álvarez-Peralta, 2014; Blickes *et al.*, 2014; Joris *et al.*, 2014), CATASTROPHY/DISASTER (Bounegru and Forceville, 2011), NATURAL DISASTER and NUCLEAR DISASTER (Horner, 2011) and DISEASE/DISASTER (Pühringer and Hirte, 2013). Among these metaphor types, NATURAL DISASTER serves as the prototypical member primarily due to its additional attributed features such as being ‘destructive’, caused by humans or disease.

In the example above, global luxury sales are characterized as *annus horribilis*, denoting ‘a disastrous or unfortunate year’, with China’s market standing out as a remarkable exception. In the original context, affluent customers purchased luxury goods as a form of investment during the financial crisis when paper assets appeared unstable. However, even industry enthusiasts did not anticipate such a remarkable recovery. This stark contrast between the calamity in the global luxury industry and the thriving Chinese luxury market accentuates its prosperity. Another instance from the data exemplifies this point - ‘The worry now is that a bursting property bubble might do *damage* to China’s lenders, *ruin* local exchequers and cast a pall over its economy—and the countries which sell to it. [ECONOMIC ACTIVITY IS A DISASTER]’ (C3). Here, terms like *damage* and *ruin* emphasize potential disastrous consequences for China’s economy. Based on these examples, I categorize DISASTER metaphorically as DAMAGE/DISASTER metaphor in this research that associates economy with negative connotations while acknowledging that the Chinese economy may be an exception or influenced by it at times.

Additionally, there are some new words or expressions in my corpus that were not listed in Lakoff’s List (1991), such as *mess* or *sour*. However, they can be classified under Lakoff’s (1991) source domains of DIFFICULTY or EATING. Considering that language boundaries are limitless, expressions like these have been excluded.

4.3 Summary

In the analysis of the Chinese economy, a total of 76 metaphors were identified from the research data and classified into six categories: MECHANICAL, ORGANISM, JOURNEY, NATURAL, WAR, and DISEASE (in descending order of frequency). A comparison with similar studies conducted on *The Economist* and other European news media during economic crises reveals a significant disparity in the utilization of metaphors. Specifically, while the DISEASE category ranks first in describing countries within the European Union, China is predominantly depicted using metaphors from the MECHANICAL category in *The Economist*, indicating a robust economy while a distanced viewpoint. Furthermore, JOURNEY metaphors are frequently employed to portray the Chinese economy; however, metaphorical representations relate to WAR and SPORTS & ENTERTAINMENT that are commonly used in news media rarely appear when depicting China's economy. Despite a general similarity in the superordinate metaphor categories used to describe China, the EU, and other economies by type, suggesting their portrayal under a dominant ideological framework, there are significant differences in their rankings and distributions. Consequently, China's economy is portrayed as powerful machines progressing on its journey with minimal interference from severe diseases or conflicts; nevertheless, it may not be extensively engaged in global economic dynamics.

The data has identified the ten most prevalent economic metaphors used to describe the Chinese economy, namely PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, LANDSCAPE WE MOVE THROUGH, PEOPLE, MACHINES, LOCATION, JOURNEY, PLANTS and LIQUID (in descending order of frequency). These metaphors dominate the discourse as they account for over fifty percent of all metaphors employed in depicting the Chinese economy. Consequently, they form the foundation of its metaphorical representation. Notably, all these top ten metaphors belong to the three primary metaphor types within each respective metaphor category: MECHANICAL, ORGANISM, JOURNEY and NATURAL. Furthermore, these metaphor categories encompass a wide range of metaphor types and exhibit the highest number among all six categories in representing the Chinese economy (refer to Table 7 in Section 4.2.1). From the quantitative and qualitative metaphor analysis, the economy is depicted as experiencing fluctuations during the financial crisis (PHYSICAL PROPERTIES), and it continues to navigate a challenging path towards progress (LANDSCAPE WE MOVE THROUGH, JOURNEY, SELF-PROPELLED MOTION). It encompasses a substantial

labor force (CONTAINER) and thrives on resilient growth engines, positioning itself prominently in the global economy (MACHINES, PLANTS, LOCATION). The country exhibits strong production capabilities such as automobile manufacturing; however, concerns arise regarding an aging workforce and workers' aspirations for wage increases that may impact its attractiveness to foreign capital in the future (LIQUID). Furthermore, China's portrayal as either a complainer or an economic manipulator does not contribute positively to its image among individuals involved in economic affairs (PEOPLE). All in all, these metaphors are used to depict China in the way that if we put everything on a scale a positive image of its economic development seems to emerge but there is caution about the future.

Recent metaphor types discussed in relevant studies, which have not been summarized in Lakoff's List (1991), were considered as modifications of existing metaphors in my study to complement Lakoff's List (1991). They include STAGE, BUBBLE, SOUND, and DISASTER when describing the Chinese economy. Although the number of these metaphor types is limited in this research, they play a prominent role in creating metaphorical imagery. The Chinese economy is portrayed as developed uniquely rather than following a predetermined script (STAGE), potentially eliciting surprise or defying economic expectations. Doubts about the future of the Chinese economy are raised by depicting it as a *bubble* on the verge of collapse (BUBBLE). The China market is depicted as prosperous through SOUND metaphors and appears to be an exception at times to economic disasters (DISASTER) during or immediately after financial crises. Thus, in line with the prevailing metaphors' portrayals, recent modifications of existing metaphor types have unveiled a detached perspective inferred from the unpredictability, albeit with a positive depiction of Chinese economic situations, while also casting doubts on its economic prospects.

In summary, the metaphor analysis reveals both positive and negative portrayals in the creation of China's economic images. While economic prosperity is positively emphasized, doubts arise regarding continuous development, indicating a potentially distanced stance. The subsequent analysis chapter will discuss metaphorical expressions framing the American economy using a similar approach, followed by a comparison of metaphorical depictions on the economies of both countries in the concluding discussion chapter.

Chapter 5 Quantitative and Qualitative Metaphorical Descriptions of the American Economy

5.1 Introduction

Similar to the preceding chapter that analyzed metaphorical descriptions of the Chinese economy, this chapter examines the quantitative and qualitative metaphoric representations of the American economy, with a specific focus on how its images are portrayed in economic discourse influenced by the subprime crisis spanning from April 2010 to March 2011

This chapter focuses on identifying source domain metaphorical expressions in metaphors describing the American economy, specifically examining how different source domain concepts frame the target domain of AMERICAN ECONOMY. The target domains encompass economic concepts associated with American economic situations, such as MARKETS, BANKS, GOVERNMENTS, FIRMS, INVESTORS and HOUSING during the crisis. All frequently occurring target words were included in Table 6 in Section 3.4.6. Similar to Chapter 4, this chapter adopted a framework that combines MIP (mentioned in Section 3.4.2) and Lakoff's List (1991) (mentioned in Section 3.4.5) to identify and code metaphorical source domains effectively. Furthermore, previously identified metaphors from relevant studies were utilized for comparison with metaphor types found in this study. Metaphor categories and frequencies were illustrated through examples to reveal the metaphorical images of America portrayed in news reports from *The Economist* during the financial crisis.

5.2 Quantitative and Qualitative Analysis of Metaphors in the Description of the American Economy

This part includes the quantitative and qualitative analysis of metaphors in the description of American economy. Initially, all metaphors found in the language data associated with American economy were calculated and categorized to provide a thorough picture of how it was depicted metaphorically. Furthermore, the metaphor categories were compared with those in former studies. Subsequently, the ten most frequent metaphor types and their frequencies were listed with examples. Additionally, each metaphor type among the ten was discussed qualitatively through typical examples. Finally, modifications of existing metaphor types were illustrated with examples.

5.2.1 Main Categories of all Metaphors in Describing American Economy

Similar to Section 4.2.1, where the superordinate metaphor categories used to describe the Chinese economy in the news data were discussed, all metaphors identified in my study for describing American economy were classified into six categories following the categorization presented Arrese (2015) and Arrese and Vara-Miguel (2016). As a reminder, I will reiterate here the metaphor categories and their corresponding labels as introduced by Arrese (2015, 2016) in the previous chapter.

- 1) health and disease (DISEASE);
- 2) natural events and disasters (NATURAL);
- 3) events around artifacts and constructions (MECHANICAL);
- 4) wars and clashes (WAR);
- 5) sports, games, and entertainment (SPORT & ENTERTAINMENT);
- 6) actions and situations of living beings (ORGANISM).

(Arrese, 2015, p. 25; Arrese and Vara-Miguel, 2016, p. 136)

However, as previously mentioned in Section 4.2.1, subtle variations may arise because metaphor categories might change when different countries' economies were discussed. Similar to metaphors describing Chinese economy in this study, metaphor types in describing American economy also include the metaphor category of JOURNEY. Additionally, in the WAR category, metaphor types such as COMPETITIONS and RISKS that may involve clashes are included. In contrast to descriptions of the Chinese economy, SPORT & ENTERTAINMENT category emerges when describing American economy, however, only metaphors associated with the concept of GAME are identified within this category. Thus, this metaphor category is employed in my dataset with the label of GAME instead of SPORT or ENTERTAINMENT.

Thus I included three modifications to the six metaphor categories proposed by Arrese (2015) and Arrese and Vara-Miguel (2016): 1) The inclusion of JOURNEY category, expands the total number of metaphor categories used to describe the American economy to seven; 2) The WAR category now incorporates concepts of competitions and risks; 3) while retaining the original category of SPORT & ENTERTAINMENT, its name has been changed to GAME due to the absence of SPORTS metaphors and limited presence of ENTERTAINMENT metaphors. Consequently, this research presents a revised set of seven categories for describing the American economy (the modified parts are highlighted in bold).

- 1) health and disease (DISEASE);
- 2) natural events and disasters (NATURAL);
- 3) events around artifacts and constructions (MECHANICAL);
- 4) wars, clashes, **competitions and risks** (WAR);
- 5) ~~sports~~, games and entertainment (**GAME**);
- 6) actions and situations of living beings (ORGANISM).
- 7) **journey** (JOURNEY);

In the data, a total of 130 types (measured by Cluster Types in AntConc) of metaphors of different source domains are identified in the corpora in describing American economies via AntConc with 971 concordance hits (measured by Cluster Tokens in AntConc). All these types of metaphors are classified into seven categories: MECHANICAL, ORGANISM, JOURNEY, WAR, DISEASE, NATURAL, and GAME. The comprehensive list of metaphor types and their respective categories can be found in Table 12 below. Similar to Table 7 in Section 4.2.1 of the previous analytic chapter, each numerical value following a metaphor type in Table 12 represents its corresponding concordance hit count. The rightmost column displays both the number of metaphor types and the total concordance hits for each category. Additionally, the percentage indicates the statistical weight of each metaphor category within the entire dataset by comparing it to all metaphors used to describe the American economy (Arrese, 2015, p. 29). The seven metaphor categories are listed in descending order of frequency, with the top ten most frequent metaphors highlighted in red and further discussed in Section 5.2.2. Additionally, six types of metaphors not included in Lakoff’s (1991) List are presented in green and will be elaborated on in Section 5.2.4.

Table 12 Metaphor categories and all metaphor types in describing American economy

Metaphor categories	Metaphor types and frequency of each type	Total number and Percentage
MECHANICAL	PHYSICAL PROPERTIES 140, CONTAINER 68, SCALE 19, PHYSICAL CLOSENESS 15, UP 14, BALANCE 12, MACHINES 11, OBJECTS 11, BUILDINGS 11, SHAPES 11, FORCES BETWEEN THE DESIRED AND THE DESIRER 9, ACCOUNTING 7, PHYSICAL FORCES 6, BRITTLE 4, CAUSING FUNCTIONAL OBJECT TO BE NONFUNCTIONAL 4, LOCKED 4, PRECEDENCE 4,	36 types; 384; 39.5%

	CONTROL 3, COMPARISON OF PHYSICAL PROPERTIES 3, LINKED 3, RENEWAL 3, TRANSFER 3, WHOLE 3, CONSTRUCTED 2, LACKING 2, BURDEN 2, CUTTING 1, EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS 1, REPLACEMENT 1, SIZE 1, TIGHTNESS 1, TANGLE 1, TOOLS 1, TRANSFERRING AN OBJECT 1, VERTICAL 1, WEB 1	
ORGANISM	SELF-PROPELLED MOTION 58, PEOPLE 55, PERCEPTIONS 29, BODY 25, LINGUISTIC 19, POSSESSIONS 16, PLANTS 11, VISIBILITY 8, STAGE 6, PREVENTING 6, GETTING 6, CHILDREN 5, BEING 4, HOLDING 4, SCANDAL 4, RELIGION 3, MISTAKE 3, WEALTH 3, PRODUCTS 3, COMMERCIAL 3, TEMPORAL 3, LIFE 2, CLEANLINESS 2, CONTRIBUTION 2, CREATOR 2, ENTITIES 2, MORAL 2, SUPPORTING 2, MESS 2, CAUSAL RELATIONS 1, FOOD 1, BADNESS 1, EVIL 1, MAINTAINING 1, BEGGING 1, CLOTH 1, CLOTHES 1, CREATING 1, CREATION 1, DUTY 1, EATING 1, EVOLUTION 1, HISTORY 1, INTERACTION 1, MISSION 1, POINTS 1, RECEPTION 1, SEEING 1, TASK 1, TOUCHING 1, WRITING 1, MAGIC 1	52 types; 313; 32.2%
JOURNEY	LOCATION 28, LANDSCAPE WE MOVE THROUGH 18, MOTION 17, PATHS 15, CHANGE 15, REGION 7, JOURNEY 4, FORWARD 2, MOVING 2, GUIDES 2, AREAS 1, DIRECTION 1	12 types; 112; 11.5%
WAR	WAR 36, COMPETITION 9, RISK 6, FIGHTING 5, TARGET 4, ADVERSARIES 3, RACE 2, OPPOSING 1, THREAT 1, WEAPONS 1	10 types; 68; 7%
DISEASE	PHYSICAL INJURY 41, MADNESS 2, DISEASE 1	3 types; 44; 4.5%
NATURAL	LIQUID 20, CLIMATE 3, LIGHT 3, DESTRUCTION 2, DISASTER 2, FIRE 2, DARKNESS 1, BUBBLE 1, SOUND 1, HEAT 1, SOMETHING MOVING TOWARD YOU 1, SOURCE 1, WARMTH 1	13 types; 43; 4.4%
GAME	GAME 4, GAMBLE 1, PUZZLE 1, STORYBOOK 1	4 types; 7; 0.7%

Total number

130 types; 971;
100%

As shown in Table 12, the metaphor categories are ranked from most to least frequent as follows: MECHANICAL (384; 39.5%), ORGANISM (313; 32.2%), JOURNEY (112; 11.5%), WAR (68; 7%), DISEASE (44; 4.5%), NATURAL (43; 4.4%) and GAME (7; 0.7%). Notably, six out of the top ten most frequent types of metaphors highlighted in red in the table belong to the two highest-ranking metaphor categories, while the remaining four represent the most frequent types within their respective categories of JOURNEY, WAR, DISEASE, and NATURE. The result in the frequency of metaphor types is in consistency with the result in that of the metaphor categories.

Like the previous analysis chapter on metaphorical depictions of the Chinese economy, this section compares metaphor categories describing the American economy with relevant studies in the field. In line with prior analyses, the seven metaphor categories in my study were compared with those presented in Arrese and Vara-Miguel's (2016) and Arrese's (2015) studies discussing economic metaphors used to describe western European countries during a comparable period of financial crisis. Additionally, a comparison was made with Charteris-Black's (2004) study which utilizes economic metaphors extracted from financial reporting selected from *The Economist*. The findings of these comparisons were presented in two separate tables and summarized using a bar graph to highlight any contrasting results.

Arrese and Vara-Miguel (2016) explored economic metaphors in published newspapers in six European countries, namely the United Kingdom, Italy, Greece, Spain, Netherlands, and Finland (Arrese and Vara-Miguel, 2016, p. 138). Additionally, Arrese (2015) examined discourse in four newspapers - *ABC*, *El Mundo*, *El Pais* and *Expansión* encompassing ten European countries in the European Union including the United Kingdom, Italy, Greece, Spain, Netherlands, Belgium, Finland, Germany, France and Poland) (Arrese, 2015, p. 26). As discussed in Section 4.2.1, the rankings and distributions of metaphor categories between these two studies were similar except for the switched positions of NATURAL and ORGANISM categories. Therefore, they were combined to compare with the results obtained from my study on American economic metaphor categories. The distribution of metaphor categories describing the American economy in my study was compared with those describing EU economies as reported by Arrese and Vara-Miguel (2016) as well as Arrese (2015), which are listed below in Table 13.

Table 13 Comparison of metaphor categories' distributions in describing American economy and European economies in financial crisis in different newspapers

Metaphor categories describing American economy	Frequency and percentage	Metaphor categories describing six EU economies	Frequency and percentage	Metaphor categories describing ten EU economies	Frequency and percentage
MECHANICAL	384; 39.5%	DISEASE	412; 27.8%	DISEASE	212; 27.3%
ORGANISM	313; 32.2%	NATURAL	370; 24.9%	ORGANISM	150; 19.3%
JOURNEY	112; 11.5%	ORGANISM	245; 16.5%	NATURAL	141; 18.1%
WAR	68; 7%	MECHANICAL	216; 14.6%	MECHANICAL	111; 14.3%
DISEASE	44; 4.5%	WAR	181; 12.2%	WAR	91; 11.7%
NATURAL	44; 4.5%	SPORTS & ENTERTAINMENT	56; 3.8%	SPORTS & ENTERTAINMENT	72; 9.9%
GAME	7; 0.7%				

In the provided table, the left two columns present rankings and distributions of metaphor categories that describe the American economy in the immediate aftermath of the mortgage crisis within my study. The right two columns display the results from Arrese and Vara-Miguel's (2016) and Arrese's (2015) studies on metaphor categories derived from six and ten European countries during a similar period of financial crisis. Noteworthy differences are highlighted in bold within the table. A comparison reveals that metaphors related to 'health and disease' (DISEASE) are most commonly employed (Arrese, 2015, p. 29) when representing European economists in news media, while MECHANICAL and JOURNEY metaphors frequently appear when describing the American economy in *The Economist*. Both American economic depictions and those of European countries place ORGANISM among their top three metaphorical categories, suggesting complex economic situations directly impacted by the financial crisis. Additionally, NATURAL metaphors feature prominently among the depictions of EU economies. Therefore, it is evident that while MECHANICAL metaphors dominate descriptions of the American economy with JOURNEY metaphors ranking third, EU countries prioritize DISEASE as their primary category with NATURAL also being among their top three choices. Consequently, it appears that the American economy exhibits greater strength and progresses on its journey while European countries find themselves passively involved in an economically depressive state akin to a disease outbreak or being affected by an 'uncontrollable external natural disaster referred to as the financial crisis' (Bikes *et al.*, 2014, p. 435; Arrese, 2015, p. 31). WAR metaphors symbolizing clashes and conflicts hold fourth place in American economic descriptions but rank higher compared to depicting European economies where they occupy second-to-last position.

Following the same analytical pattern as in the previous chapter, the results of metaphor categorization for the American economy was compared with those discussed in Charteris-Black's (2004) study, which also utilized metaphors from financial reporting in *The Economist* as linguistic data. As mentioned earlier, Charteris-Black did not specify the country or countries under investigation. Examples such as New Zealand, Germany, Canada, Russia, Europe, Brazil, Iraq and America were cited without explicit specificity. This approach helps demonstrate that any differences found between my study and Charteris-Black's (2004) are not solely due to variations across countries. By comparing my data with Charteris-Black's larger corpus aimed at establishing 'representative and typical use' of metaphors 'in general' (2004, p. 27, 31) within *The Economist* contextually reveals unique features specific to metaphor categories present in my dataset. The comparison is listed in the following side-by-side table below. A side-by-side comparison table presenting these findings is provided below: The left-hand columns represent distribution of metaphor categories describing the American economy while on right-hand side presents results from Charteris-Black's (2004) research.

Table 14 Comparison of metaphor categories' distributions in describing American economy and other countries' economies in *The Economist*

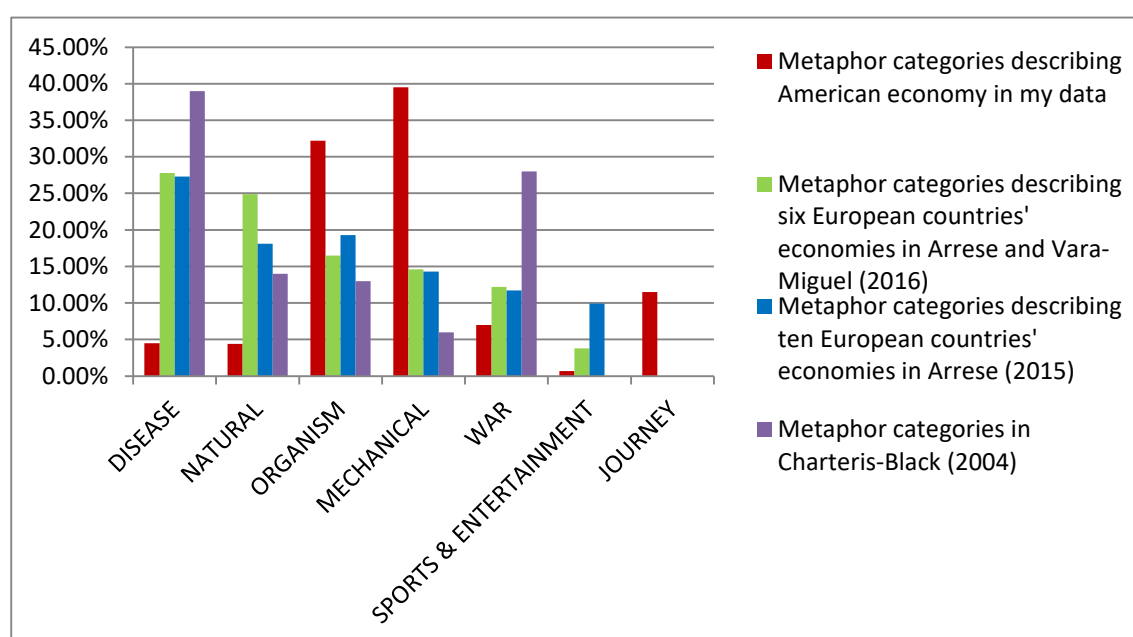
Metaphor categories describing Chinese economy	Percentage	Metaphor categories describing other countries	Percentage
MECHANICAL	384; 39.5%	DISEASE	39%
ORGANISM	313; 32.2%	WAR	28%
JOURNEY	112; 11.5%	NATURAL	14%
WAR	68; 7%	ORGANISM	13%
DISEASE	44; 4.5%	MECHANICAL	6%
NATURAL	44; 4.5%		
GAME	7; 0.7%		

The top three metaphor categories portraying American economy are MECHANICAL, ORGANISM and JOURNEY. Interestingly, Charteris-Black's (2004) study identified DISEASE, WAR, and NATURAL as the primary metaphor categories for other countries' economies. However, when describing the American economy in *The Economist*, these DISEASE-related and NATURAL metaphors are less prevalent and rank lower in comparison to MECHANICAL metaphors which are the most predominant in describing American economy. Thus in *The Economist* the result in describing America is to a large extent opposite to metaphorical descriptions of other countries. Similarly to European

countries' depiction, DISEASE-related and NATURAL metaphors feature prominently while MECHANICAL metaphors are less frequently employed.

The comparative findings of metaphor categories used to describe the American economy in my study, as well as in previous research conducted by Arrese and Vara-Miguel (2016), Arrese (2015) and Charteris-Black (2004), can be visually represented through the bar graph provided below. Furthermore, the metaphor category of GAME employed in my data falls under the broader category of SPORTS & ENTERTAINMENT depicted in the graph, given that the concept of GAME is encompassed within the domain of SPORTS & ENTERTAINMENT.

Figure 12 Distributions of metaphor categories describing American economy and European countries and other countries' economies



Overall, the bar charts above highlight the European countries in various news media and *The Economist's* general financial report of the world economy through the metaphorical category of DISEASE (represented by long blue, green, and purple bars), while the American economy is metaphorically framed more prominently under the MECHANICAL category (represented by a long red bar). Additionally, the JOURNEY category is only used to describe America. Furthermore, metaphoric categories such as NATURAL (long blue, green, and purple bars) appear relatively more frequently when describing European and other countries' economies to emphasize weaknesses and attribute economic malaise to occasional and uncontrolled causes (Arrese and Vara-Miguel, 2016, p. 146). Conversely, metaphoric categories like ORGANISM and JOURNEY (long red bars) are more commonly employed when depicting the American economy. Among

these categories, ORGANISM appears almost equally in similar positions based on my studies on the American economy, as well as the studies conducted by Arrese and Vara-Miguel (2016) and Arrese (2015) on European economies. However, this bar graph indicates a relatively higher frequency of its usage in describing the American economy. Moreover, WAR – a prevalent category in Charteris-Black’s (2004) study describing unspecified countries – is also utilized more often when discussing the American economy compared to EU economies. Nevertheless, the proportion of WAR category used for describing the American economy does not exceed that for describing European countries based on observations from this bar chart. This is even though this category holds a higher ranking in describing the American economy compared to those used for EU economies. The similarities observed among these research findings regarding metaphor categories may confirm the shared frames of interpretation created by the power of the conceptual metaphors for financial and economic crisis (Arrese, 2015, p. 31). However, significant disparities can be observed in the rankings and distributions of metaphorical categories when depicting the American economy in *The Economist* compared to other newspapers’ coverage of European countries during the financial crisis, as well as general economic portrayals within *The Economist*. These discrepancies may indicate varying focal points and emphases on different countries’ economies to a certain extent.

The results in this section were compared with the metaphor categories used to depict the Chinese economy in the previous chapter, as discussed and concluded in the final chapter. Subsequently, the following section presents an analysis of the ten most frequently employed metaphors that specifically portray the American economy.

5.2.2 Ten Most Frequent Metaphors Used to Depict American Economy

The ten most frequently occurring metaphors out of the 130 identified types, used to depict the American economy, are presented in Table 15 below. They are listed in descending order of frequency, ranging from the most frequent (140 occurrences) to the least frequent (20 occurrences). These metaphors appear in the language data with varying frequencies and percentages (as indicated in Frequency, Range and Ratio column of the table). In the examples provided, words representing metaphorical source domains are highlighted in bold font. It should be noted that both BODY and PERCEPTIONS metaphors have equal frequencies; hence their listing follows their range.

Table 15 Ten most frequent metaphor types in describing American economy
(Frequency: F, Range: R, Ratio in metaphors describing American economy)

SOURCE DOMAINS and metaphor categories	Frequency(F), Range(R), Ratio (percentage)	Examples with Metaphorical Words in Bold
1. PHYSICAL PROPERTIES (MECHANICAL)	F=140 R=17 14.4%	It is unlikely (though not impossible) that prices will plummet once more; price declines are likely to be small relative to those experienced in 2008 and 2009. (A2)
2. CONTAINER (MECHANICAL)	F=68 R=16 7.0%	The Dodd-Frank act restricted credit-card penalties and overdraft fees and proposed a cap on the amount banks can charge retailers for debit-card transactions. (A20)
3. SELF-PROPELLED MOTION (ORGANISM)	F=58 R=13 6.0%	Although everybody agrees on the need to overhaul Fannie and Freddie, nobody is rushing to do much about it. (A6)
4. PEOPLE (ORGANISM)	F=55 R=12 5.7%	The storefront for Mango Financial, a young Texan company, was designed by one of Austin's most fashionable architecture firms. (A20)
5. PHYSICAL INJURY (DISEASE)	F=41 R=12 4.2%	All this stands in the way of a full-blooded recovery . (A7)
6. WAR (WAR)	F=36 R=7 3.7%	The American mortgage mess - Banks are under assault from buyers of mortgage securities. (A12)
7. PERCEPTIONS (ORGANISM)	F=29 R=10 3.0%	But in the short term eyes are fixed on the Federal Reserve. (A7).
8. LOCATION (JOURNEY)	F=28 R=13 2.9%	The states, in turn, can't support troubled municipalities indefinitely. (A11)
9. BODY (ORGANISM)	F=25 R=12 2.6%	That said, both Europe and America seem to be suffering from delusions—of strength and weakness respectively. (A7)
10. LIQUID (NATURAL)	F=20 R=12 2.1%	The two firms, which own or guarantee more than half of the country's \$10.7 trillion of mortgages, are awash in red ink . (A6)
Total	F=500 R=20 51.5%	

The table above illustrates the ten most frequent metaphors in the selected twenty articles, namely PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED

MOTION, PEOPLE, PHYSICAL INJURY, WAR, PERCEPTIONS, LOCATION, BODY and LIQUID. These metaphors appear 500 times in the data and account for more than fifty percent of all metaphors (total concordance hits 971) describing the American economy. Therefore, these frequently employed metaphors play a ‘dominant’ role in ‘framing’ the metaphorical recognition of American economy (Arrese and Vara-Miguel, 2016, p. 145). Among them are two metaphor types (PHYSICAL PROPERTIES and CONTAINER) that belong to the MECHANICAL metaphor category and constitute 21.4% of all occurrences of the most frequent metaphor types. Additionally, four metaphor types (SELF-PROPELLED MOTION, PEOPLE, BODY and PERCEPTIONS) fall under ORGANISM category accounting for 17.3%. Other categories such as DISEASE (PHYSICAL INJURY metaphor), WAR (WAR metaphor) and JOURNEY (LOCATION metaphor) also incorporate biological attributes and can be classified as animate metaphors with an overall percentage of 10.8%. Consequently, the description of the American economy contains a higher proportion of ‘animate/biological’ metaphors compared to ‘inanimate/mechanical’ ones (Charteris-Black, 2004, p. 137). The biological metaphors serve to connect economic concepts with ‘the struggle of existence’ and survival since “the struggle for existence causes those organisms to multiply and best fitted to derive benefit from their environment” (Charteris-Black, 2004, p. 137). Animate and inanimate metaphors have different ‘persuasive effect in discourse’ (Charteris-Black, 2004, p. 249). In financial reporting, the use of ‘animate metaphor systems highlight the predictability’ of economic processes and “is likely to be effective in persuading by arousing particular emotions” (Charteris-Black, 2004, p. 249).

The lexical items of metaphors in these prevalent metaphor types are summarized in Table 16 provided below.

Table 16 Ten most frequent metaphor types and metaphorical expressions in describing American economy

Metaphor types	Lexical items
1. PHYSICAL PROPERTIES	<i>rise, fall, decline, plummet, below, high, highest point, big, small, up, down, low, raise, large, protract, reduction, heavily, enhancement, wide, volume, prolong, giant, jump, big, huge, boom, promote, over, central, short, long, extend, mountain, mounting, heart, deep, maximize, overall, raise, spike, slump, bulk, narrow, peak, downsize, decline, shrank, above, drop, further, vast, fat, decline, level</i>
2. CONTAINER	<i>buffer, into, in the year/ the early 1980s/ the short term/ 2008/ 2011/ a few days/ recent months/ times of crisis, into autumn, build up,</i>

	<i>margin, area, pool, closed the year, cap, within, out of, in, exit, foreclosed, room, pocket, tough, corner, breach, exposure, hedge, outside, inside, take out, around, contain, verge, gap, model</i>
3. SELF-PROPELLED MOTION	<i>grind to a halt, climb out of a deep hole, cash-strapped, stand in the way of, rushing, make, process, stuck, slide towards, forced, slapped, shorten the queue, start, end, reach, roar back, sloppy, slow, proceed, get into mess, help, lead, slackened, valid goal, without intervention, provide cushion, soar, stretched, hard slog, be forced into, first step, accelerate, boost, hold back, reach nearly</i>
4. PEOPLE	<i>fearful, alive, cautious, careful, irrational, enjoy, offer, behalf, see, take their place, reorient their efforts, envy, shy, benefit, obsession, young, complain, dependence, alliance, fashionable, carry on, sell, offender, stamp, need, canny, know, borrow, poise, blush, alone, regret, guarantee, mature, expect, head, encourage, avoid, act, charge, say, life, read, face, free, behave, decision, plan, active, look at</i>
5. PHYSICAL INJURY	<i>recover (recovery), suffer (suffering), pain, painfully, injured, recession, hurt, linger, shock, full-blooded recovery, hit, inflicted, throttled, woe</i>
6. WAR	<i>battle, fight back, combat, attack, threat, vanguard, assemble, tussle, stand against, threaten, securitise, safe, protect, protection, struggle, bruise, under assault, conflict, hack, retaliation, challenge, withdraw, rally, colonise, shelter, settlement, tussle</i>
7. BODY	<i>strong, strongly, strength, weak, weakness, heart, return to health, squeamish, handle, face, arm</i>
6. PERCEPTIONS	<i>signal, sign, show, view, focus, eyes, transparency, dismantle, draw attention, point, fixed on, make clear, highlight, hide, cover, ideological perspectives, see</i>
9. LOCATION	<i>remain, prop, support, stay, fallout, emerge, sustain, maintain, renew, lead, final, eliminate</i>
10. LIQUID	<i>flow, wash away, cold shower, surge, sink, shed, awash, red ink, source, squeeze, flood, steady stream, evaporate, liquidity, flush</i>

In the subsequent section, a qualitative analysis is conducted on the ten most prevalent metaphors used to depict the American economy, accompanied by illustrative examples, to ‘reinforce’ the findings ‘of the quantitative research’ (Arrese and Vara-Miguel, 2016, p. 144).

5.2.3 Qualitative Analysis of the Ten Most Frequent Metaphor Types

The qualitative analysis of the ten most frequent metaphor types describing the American economy is presented in this section. Like Section 4.2.3, which examined the most frequent metaphors used to describe the Chinese economy, two representative examples and qualitative explanations are provided for each of the top ten metaphors depicting the American economy. These metaphors include PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, PEOPLE, PHYSICAL INJURY, WAR, BODY, PERCEPTIONS, LOCATION and LIQUID – listed in order of their frequency as stated in section 5.2.2. All examples consist of sentences containing prevalent sub-metaphors or expressions within each metaphor type from my metaphor corpus words collection; they are discussed extensively and occasionally associated with context to reveal how America’s economy is metaphorically depicted and framed in financial news discourse while indicating potential attitudes towards it. In this section, examples are marked with their respective metaphor names and news article numbers as they appear in my corpus; italicized text represents the specific metaphor corpus words or expressions used within these examples.

PHYSICAL PROPERTIES metaphor

Example 1. Yet the *decline* and recovery were very uneven. Sales *plummeted* in America to levels last seen in the early 1970s—almost 40% *below* their *highest point*.
[ECONOMIC PROPERTIES ARE PHYSICAL PROPERTIES] (A10)

The most prevalent metaphors in describing the American economy’s PHYSICAL PROPERTIES involve conceptualizing AMOUNT as VERTICALITY, with 86 occurrences (Lakoff *et al.*, 1991, p. 14). Within the corpus data, metaphorical expressions such as ‘*rise, fall, high, low, raise, decline, up and down*’ are used to metaphorically map various economic measurements including ‘prices, sales, profits, taxes, deficit, subprime lending, recoveries and loans’ onto the concept of verticality (see Table 16 in Section 5.2.2). In the given example above, vivid metaphorical word expressions like *plummeted* and *below* effectively illustrate a significant decrease in car sales in America. This refers to car sales influenced by the housing market. The original news article provides information stating that ‘With the housing market still in the doldrums and cash-for-clunker subsidies at an end, consumers will be wary about buying big-ticket items’ (A10). Therefore, by employing metaphorical expressions like *plummeted* and *40% below their highest point*, it vividly emphasizes a sharp and abrupt decline in car sales across America.

Like the metaphorical descriptions of the Chinese discussed in the previous section, metaphors conveying ‘rising’ or ‘falling’ are frequently used in the data about the American economy. However, it is not appropriate to assess the overall state of the American economy as good or bad solely based on a count of metaphorical expressions without considering their original context. For example, in another sentence - ‘American demand will *rise* only slightly, if at all.’ (A10), *rise* is employed to illustrate that car demand in America will increase, which can be seen as positive news for the economy. Nevertheless, from the surrounding context, readers can infer that this increase would be minimal and therefore falls short of being truly optimistic.

Example 2. The Export-Import Bank has authorised record volumes of trade credit, but Fred Hochberg, its president, says America still spends less on such efforts than China or Canada do, even though its economy is much *larger*. [ECONOMIC PROPERTIES ARE PHYSICAL PROPERTIES] (A1)

The sub-metaphor AMOUNT IS A PHYSICAL PROPERTY - Amount is Size (Lakoff *et al.*, 1991, p. 14) (34 occurrences) appears as the second most frequent within the domain of PHYSICAL PROPERTIES. Similar to Lakoff’s List (1991, p. 13) where ‘Let’s look at the *larger* issues.’ exemplifies the mapping of ‘Importance is Size’, in Example 1, the abstract concept of economy is metaphorically endowed with size through the word *larger*, implying that a country’s economy can be perceived as a visible and measurable entity of smaller or bigger size, representing varying degrees of significance. This underscores the pivotal role played by the American economy.

The examples illustrate the various perspectives on the American economy, including its recovery from the financial crisis characterized by going through uneven ups and downs. The significance of America as a major player in the global economy is emphasized to its *large* scale. The tone conveyed using PHYSICAL PROPERTY metaphors is nuanced rather than completely positive or negative.

CONTAINER metaphor

Example 1. But a slide into a second recession would require firms to cut back again on stocks, capital spending and jobs. The cash *buffer* corporate America has *built up* in case of harder times makes a fresh shock of that kind unlikely. [INVESTMENTS ARE CONTAINERS FOR MONEY] (A7)

In contrast to CONTAINER metaphor types depicting Chinese economy within which the most frequent ones being SHAPES ARE CONTAINERS (Lakoff *et al.*, 1991, p. 167), the metaphor INVESTMENTS ARE CONTAINERS FOR MONEY (Lakoff *et al.*, 1991, p. 182) is predominantly employed (27 occurrences) when describing the American economy. When characterizing the Chinese economy, a CONTAINER metaphor is primarily utilized to represent its labor resource, while terms like ‘islands, sea and pool’ are employed for this purpose. Conversely, when discussing the American economy, metaphoric expressions such as ‘profit *margins*, *cap* of amount of debit banks can charge, debt *areas* and *close* fiscal deficit’ frequently appear in relation to money or benefits. As Lakoff and Johnson (2003) state, “There are few human instincts more basic than territoriality” (2003, p. 29). By establishing boundaries around money or investment, financial reporters attempt to define or quantify economic trends. The term *pool* used in describing both economies also appears in phrases like ‘mortgage *pool*,’ which falls under the mapping INVESTMENTS ARE CONTAINERS FOR MONEY is used (see Table 16 in Section 5.2.2). The mapping SHAPES ARE CONTAINERS only occurs once in ‘*wider pool* of unbanked customers’ (see Table 16 in Section 5.2.2). This suggests that within similar metaphorical frameworks, different expressions or focuses may vary across different economies. News articles emphasize China’s labor force as an important economic resource for its development while paying greater attention to money and investments when reporting on America.

Example 2. As global recovery continues, we’ll once more see substantial increases in the prices of many important commodities. Oil is currently over \$90 per barrel, and American petrol prices *closed the year* over \$3 per gallon, an unusually high December level. Prices near \$4 per gallon contributed to the sharp economic slowdown *in 2008*; indeed, high oil prices have nearly always meant economic pain for developed nations. [(BOUNDED) TIME IS A CONTAINER] (A13)

Similar to the CONTAINER metaphors describing Chinese economy, the second most frequent metaphor within this type is TIME IS A CONTAINER (bounded) (Lakoff *et al.*, 1991, p. 78). In Example 2, under the background of global recovery following the mortgage crisis, which represents a critical moment, time may become a sensitive aspect for financial reporters. They may seek to comprehend the trend pace of economic recovery of different countries as a fast recovery can indicate strong economic power and strength. In this example, the italicized expressions attribute concrete and bounded characteristics to an otherwise invisible, abstract and vague concept of time by likening it to ‘land areas’ (Lakoff and Johnson, 2003, p. 29) with boundaries. Lakoff’s List (1991) includes an

example like my metaphorical expression *in 2008* – “*In 1968. . .*” (1991, p. 78). Other metaphorical expressions describing BOUNDED TIME in relation to the American economy found in my data include ‘*in times of crisis, into autumn, in times, in a few days, in the year, in recent months, and in 2011*’. In cases like these’, it can often be challenging to recognize any ‘hidden’ metaphor or even acknowledge the presence of a ‘metaphor at all’, as ‘conventional thinking about language’ sometimes makes it difficult to conceive that it may not align with ‘reality’ (Lakoff and Johnson, 2003, p. 10). However, TIME cannot be physically entered into ‘into’ or exited from; thus, the concept itself lacks visible or tangible boundaries. We tend to “project our own in-out orientation onto other physical objects that are bounded by surfaces” and perceive them as “containers with an inside and an outside” (Lakoff and Johnson, 2003, p. 29). Unlike the example ‘He’s like something *out of the last century*.’ (Lakoff, 1991, p. 78), which also appears in Lakoff’s List, time expressions in the data presented here are all expressed within temporal boundaries rather than beyond them. This might indicate sketchers’ eagerness to position themselves as insiders who can ‘predict’ the timeframe for economic recovery (Charteris-Black, 2004, p. 72, 135). Their attitudes are intertwined with economic recovery efforts and may find it difficult to position themselves as ‘outsiders’ or objective observers (Bickes *et al*, 2014, p. 440).

The CONTAINER metaphors portrayed the American economy with both positive and negative connotations (Baker *et al.*, 2008, p. 293). The first example highlighted the relatively optimistic outlook of the American economy, despite being impacted by the economic crisis, due to its substantial cash reserves that would serve as a safeguard against a potential second recession symbolized by the cash *buffer built up* by America. However, the second example indicated expectations for a complete recovery in the American economy, suggesting that it has not yet fully regained its strength.

SELF-PROPELLED MOTION metaphor

Example 1. But on the current evidence don’t expect America’s recovery to *grind to a halt*. [ECONOMIC ACTION IS SELF-PROPELLED MOTION] (A7)

The most frequently employed metaphors within the SELF-PROPELLED MOTION metaphor type are those of ‘Manner of Action is Manner of Motion’ (15 occurrences) (Lakoff *et al.*, 1991, p. 27). In this example, the manner and speed of motion depict the way and pace at which the American economic recovery unfolds. It is conceptualized as sluggish process, almost coming *to a halt* and *grinding* along. These metaphors effectively

highlight the challenges and slow progress in America's recovery. Despite facing deflationary pressures and persistent unemployment, it is implied that there are no expectations for a complete pause or cessation in the American recovery.

Example 2. He reckons that Florida's economy faces “a long and protracted *climb out of a deep hole*”, with unemployment remaining in double digits until 2012. It will be 2014 before Florida's payrolls recover to pre-recession levels, he predicts. [ECONOMIC ACTION IS SELF-PROPELLED MOTION] (A5)

The metaphorical depictions of the Chinese economy within the SELF-PROPELLED MOTION metaphor type primarily focus on the ‘Manner’ and ‘Speed’ of Motion (see Section 4.2.3). While in describing the American economy, metaphors frequently appear in the source domain of SELF-PROPELLED MOTION not only include those but also ‘Obstacles to Action are Obstacles to Motion’ (6 occurrences) (Lakoff *et al.*, 1991, p. 31). In the data, Florida appears as a representative location for depicting the American economy, just as Beijing is portrayed as an epitome and typical representative of the Chinese economy affected by the subprime crisis (as shown in Table 3.6.2-2 in Chapter 3). The original news also states that ‘Florida played its full part in the subprime excesses and has ranked first for mortgage fraud among American states’ (A5), making it akin to a microcosm of the US economy impacted by the subprime crisis. In Example 2, Florida encounters economic difficulties analogous to *climbing out of a deep hole* where this *deep hole* symbolizes an obstacle on the road towards economic development. The metaphor ‘Obstacles to Economic Action are Obstacles to Motion’ (Lakoff *et al.*, 1991, p. 31) is employed. Within the news context, this obstacle refers to Florida's persistent unemployment issue, which is also a major problem across America. By using the metaphorical expression *climb out*, the metaphor ‘Manner of Economic Action is Manner of Motion’ (Lakoff *et al.*, 1991, p. 27) is also adopted here to further convey that overcoming this obstacle is arduous for their economy – the manner of people exerting great strength while climbing out of a hole. Other metaphorical expressions found in my data comparing difficulties faced by the American economy with obstacles include phrases like ‘*cash-strapped*’ and ‘*stands in the way of*’ (see Table 16 in Section 5.2.2). All these instances highlighted American economies difficulties.

The SELF-PROPELLED MOTION metaphors highlight the challenges encountered by the American economy during its recovery, potentially eliciting greater ‘sympathy’ towards America's situation (Bickes *et al.* 2014, p. 439). Based on contextual evidence, it

is evident that the recovery of the American economy is gradual but ongoing, with a trajectory towards regaining pre-recession levels.

PEOPLE metaphor

Example 1. How real are the risks of a double dip in the United States? ...Firms *fearful* of weak consumer spending are *cautious* about investing. [COMPANIES ARE PEOPLE] (A7)

The metaphor type COMPANIES ARE PEOPLE is predominantly employed in the PEOPLE metaphor (16 occurrences). In this instance, American firms can exhibit fear and caution similar to individuals. Charteris-Black's research on financial reports in *the Economist* also includes corpus lines for 'fear' that follow the pattern of 'fear + inflation' (2004, p. 147), which is 'specific to financial reporting' (2004, p. 148). According to his study, countries, banks, policies and markets are like people as having a *fear* of inflation while companies and markets can be described as '*vulnerable*' (Charteris-Black, 2004, p. 148). During times of economic crisis, firms can be likened to individuals experiencing fear and anxiety, as they are characterized by a state of 'mental uncertainty' (Charteris-Black, 2004, p. 148). In the context of news reporting, this atmosphere of fear and lack of trust hampers economic recovery. To address this issue, firms may require government guarantees as indicated in the data that suggests 'if policymakers get the signals right', they can '*reorient their effort*' 'towards' the possible right direction (A1). Furthermore, it has been acknowledged that 'the Fed has sent the right signal' justifying 'concern' without 'panic' 'at the moment' (A7). Thus, governments are conceptualized as playing a crucial role in providing powerful and trustworthy economic guidance while attributing economic uncertainty to firms' fears and caution along with unskilled workers who are blamed for hindering economic recovery.

Example 2. A wider federal deficit offsets private retrenchment but prolongs America's *dependence* [COUNTRIES ARE PEOPLE] on foreign savings. Tax credits and mortgage guarantees keep the housing market *alive* [MARKETS ARE PEOPLE] yet compound distortions that contributed significantly to the debt mountain in the first place. (A1)

The example includes two prevalent metaphors: COUNTRIES ARE PEOPLE, which is also frequently used to describe the Chinese economy in the preceding section, and

MARKETS ARE PEOPLE. In the first metaphor, America is likened to an individual due to its dependence. The second metaphor portrays the American housing market as a living organism that requires sustenance for survival. Both metaphors emphasize the reliance on foreign savings or tax credits and mortgage, which can lead to economic ‘imbalances’ and hinder efforts towards ‘rebalancing America’s economy’ as reported in the news. The utilization of PEOPLE metaphors negatively depicts America’s dependency on foreign savings and support from tax credits and mortgage to keep housing market *alive*, attributing them as obstacles to economic recovery and escalating debts. This implies their association with significant social value (Charteris-Black, 2004, p. 148) while playing a crucial role in financial activities.

PHYSICAL INJURY metaphor

Example 1. America's *recovery* will accelerate. To a significant extent, a strong American *recovery* has been delayed by America's failure to believe in the inevitability of a strong American *recovery*. [ECONOMIC HARM IS PHYSICAL INJURY] (A13)

ECONOMIC HARM IS PHYSICAL INJURY is a traditionally and commonly used sub-metaphor within the metaphor name HARM IS PHYSICAL INJURY in Lakoff’s List (1991, p. 45). This metaphorical mapping compares negative economic events or situations to physical injuries on individuals, highlighting the experiential grounding that ‘physical injury is harmful to people’ (Lakoff, 1991, p. 45). The metaphor type ECONOMIC HARM IS PHYSICAL INJURY maps the domain of ECONOMY onto that of PHYSICAL INJURY. In my data, the metaphor corpus word *recovery* (*recoveries*, *recover*) (17 occurrences) was most frequently used to describe America’s economy within this metaphor type. From both general data and Example 1, it can be inferred that America’s economy needs to recover after being ‘injured’ by the economic crisis. People may interpret this as meaning that American economy has been seriously injured by the mortgage crisis and requires significant recovery efforts; alternatively, they may view it as already having begun its recovery process despite initial setbacks. The tone conveyed through use of *recovery* metaphors in Example 1 appears positive and confident, suggesting a belief in America’s ability to achieve strong and accelerated economic growth.

Example 2. That said, both Europe and America seem to be *suffering* from delusions—of strength and weakness respectively. [ECONOMIC HARM IS PHYSICAL INJURY] (A7)

PHYSICAL INJURY metaphors appear most frequently in the category of DISEASE in describing American economy. The use of INJURY implies ‘a negative evaluation of the agent’ ‘responsible for’ causing harm (Charteris-Black, 2004, p. 25). When combined with FIGHTING or WAR metaphors that signify attempts to ‘gain dominance’ through ‘hurting’ and ‘inflicting pain and injuring’ (Lakoff and Johnson, 2003, p. 84), it facilitates the ‘modeling of economic discourse’ (Lakoff and Johnson, 2003, p. 260). Consequently, this metaphor highlights both the injurer and the victim in portraying America’s economy as a casualty or victim *injured* of financial crisis.

The metaphor corpus words *suffer* or *suffering*, as well as *pain* and *painfully*, are frequently employed in describing the state of America’s economy within the metaphor type ECONOMIC HARM IS PHYSICAL INJURY (see Table 16 in Section 5.2.2). This conceptualization portrays the unpleasant economic experience akin to physical injuries, emphasizing its severity. In the example, concerns and uncertainties regarding America and Europe’ economic recovery are highlighted through the use of *suffer*. Similarly, in the sentence “Florida’s best-known industry, tourism, has also *suffered* from the recession” (A9), the economic recession is mapped onto the domain of PHYSICAL INJURY — implying a tangible sense of pain. Additional instances can be found in sentences “A sale of \$4 billion in longer-term debt went better, but still at *painfully* high yields.” and “A protracted battle the banks: if they can spread the *pain* over several years, repurchases will continue to hack at their profits but will not threaten their solvency—not even that of the heavily exposed BofA.” in A11 and A12 respectively. PHYSICAL INJURY metaphors may imply the negative situation of American economy. However, according to the news source from which Example 2 is derived, it suggests that “the United States seldom looks at Europe with economic envy” this time. Nevertheless, ‘it is too soon to despair about their economy’ for America and the ‘fear of renewed *recession* in America is overblown’ (A7). The notion that these worries are unfounded sets the tone as mere illusion rather than fact. Similar to the previous usage of PHYSICAL PROPERTY metaphors, one cannot infer financial reporters’ attitudes solely based on counting the numbers of metaphors conveying the meaning of ‘up’ or ‘down’, but rather their context must be considered in order to comprehend the conveyed sentiments within news articles. Although there appears to be a relatively high frequency of metaphorical expressions related to *suffering* or *pain* at first glance, when examined in relation to the context, they do not indicate despair regarding the American economy but rather confidence. Therefore, relying solely on counting metaphorical words or expressions may result in an oversimplification of the essence of

news texts.

The utilization of PHYSICAL INJURY metaphors can be perceived as a subtle strategy to elicit ‘reader sympathy’ towards the object by portraying ‘it as a victim’ (Charteris-Black, 2004, p. 26). The mortgage crisis originated in the US (Arrese, 2015, p. 23; Arrese and Vara-Miguel, 2016, p. 135), and their usage ‘may imply strong political sympathies’ on American economy’s injury (Charteris-Black, 2004, p. 26). Metaphors associated with PHYSICAL INJURY tend to conceptualize objects from a negative perspective; however, Examples 1 and 2 presented here suggest that America should adopt a more optimistic outlook on its economic future.

WAR metaphor

Example 1. In the *vanguard* [ECONOMIC ACTIVITY IS WAR] of this *battle* [ECONOMIC ACTIVITY IS A BATTLE] are Fannie Mae and Freddie Mac, America's nationalised housing agencies, which have so far forced banks to take back \$13 billion-worth of dodgy debt. (A12)

In Lakoff *et al.* (1991), the concepts of COMPETITION, THEORIES, ARGUMENT GAINING PHYSICAL INTIMACY (AGAINST RESISTANCE) and TREATING ILLNESS are mapped onto WAR/FIGHTING A WAR (1991, p. 66, 113, 117, 164, 176) via the usages of *battle* and *fight* to intensify the descriptive atmosphere. The EXISTENCE in WAR is often compared to LIFE itself while FAILURE and SUCCESS in WAR may be perceived as DEATH and LIFE respectively (Lakoff *et al.*, 1991, p. 67). These two frequently used metaphor corpus words - *battle* and *fight* - also prominently appear when describing America’s economy using WAR metaphors. For instance, Fannie Mae and Freddie Mac mentioned in Example 1 represent “government-sponsored enterprises” (GSEs) that operate within a grey area between state and private ownership as introduced in the news article; they benefit from an implicit government guarantee on their debt while simultaneously striving to maximize profits for shareholders’ interests (A6, Appendix A). The GSEs are regarded as ‘unnecessary evils’ responsible for mortgage instability and subprime mortgage mess which should be eliminated entirely and ‘get rid of’ (A6). Consequently, by mapping ECONOMY domain onto the WAR domain through metaphors such as *vanguard* and *battle* these representative nationalized housing agencies - Fannie Mae and Freddie Mac’s financial activities are portrayed as frontline battles against banks thereby creating an oppositional relationship between them.

Within the dataset, a sequence of WAR metaphors frames clashes and conflicts between GSEs and American banks, attributing blame for the mortgage crisis to fraud committed by GSEs. For instance, in response to the *battle* initiated by Fannie Mae and Freddie Mac, ‘Banks have made clear that they will *fight back*. BofA has *assembled* a vast legal team to help with this “hand-to-hand *combat*”, as described by Brian Moynihan, the bank’s CEO, has described its *tussles* with investors. He has vowed to *stand firm against* “people who come back and say, ‘I bought a Chevy Vega but I want it to be a Mercedes (A12, Appendix A).’” These italicized metaphorical expressions enhance the portrayal of WAR between GSEs and banks that contributed to an ‘American mortgage mess’ as stated in the news headline. Consequently, these conflicts have prompted certain companies’ plans for relocation from America; as stated that ‘Still, the *fight* has already been sufficiently *bruising* that some want out: Goldman Sachs is reportedly seeking buyers for its recently acquired mortgage-servicing unit Litton due to the arduous nature of these battles (A12)’. Despite facing such tumultuous circumstances, financial journalists remain optimistic about America. The article concludes that ‘A protracted *battle* suits the banks: if they can spread the pain over several years, repurchases will continue to hack at their profits but will not *threaten* their solvency—not even that of the heavily exposed BofA (Bank of America) (A12)’. This suggests confidence in America’s banks sector prevailing despite under attack. The utilization of WAR metaphors portrays a negative image of intense economic chaos within the US economy while potentially revealing pressures endured following the subprime crisis aftermath. However, amidst these polarized perspectives within this WAR-like scenario, GSEs are depicted as malevolent entities while banks are portrayed as justified heroes.

Example 2. Mr. Obama's supporters on the left want him to *attack* imbalances by supporting domestic manufacturers (an activity delicately termed “industrial policy”) and punishing other countries, particularly China, that they say trade unfairly. [ECONOMIC ACTIVITY IS FIGHTING A WAR] (A1)

The utilization of *attack* in the depiction of America’s economy is a prevalent representation in WAR-related metaphors. In this instance, ‘other countries, particularly China’ are perceived as adversaries by ‘supporters on the left’ and are seen as targets for economic restrictions through policies or enforcement measures, expressed in the sentence as should be *attacked*. The metaphor aligns with the sub-metaphor of ‘Attacking Economic Entities is Attacking a Fortification’ (Lakoff *et al.*, 1991, p. 118). By employing the war

metaphor, various entailments such as ‘enemies’ and ‘threats to national security’ emerge, necessitating actions like ‘setting targets’ ‘gathering intelligence’ and ‘plotting new strategies’ (Lakoff and Johnson, 2003, p. 35). These metaphorical representations serve to ‘highlight certain realities’ while providing justifications ‘for economic and political actions and policy changes’ (Lakoff and Johnson, 1980, p. 157).

In Example 2, the president’s supporters function as intelligence agents who advocate for industry policies aimed at addressing imbalances through strategies that involve supporting domestic manufacturers and penalizing countries engaging in unfair trade practices—particularly China, expressed by *attacking*. Consequently, this reveals an ideological stance where America and its domestic manufacturers are considered part of their own group requiring support while countries like China belong to ‘other group’ posing ‘threats’ to their ‘interests’ (van Dijk, 2006, p. 730), conceptualized via the WAR metaphor as ‘external’ entities that are ‘foreign and hostile enemies’ (Lakoff and Johnson, 1980, p. 157). Therefore, the ‘protection’ (van Dijk, 2006, p. 730) and ‘defence’ via of US economic security necessitates ‘punitive’ measures against China (Lakoff *et al.*, 1991, p. 119). According to the original news article, it is later mentioned that ‘The president slapped tariffs on cheap tyres from China, proposed making it harder for multinationals to defer taxes on profits from abroad, earmarked stimulus money for green-technology investment and agreed to impose “buy American” provisions on anything bought with stimulus funds’ (A1). Such information reported in the news may indicate tensions between America and China. The utilization of WAR metaphors ‘intensify’ conflicts within and outside of America (Bickes *et al.*, 2014, p. 441) and implies American processes are governed by ‘bellicose strategies rather than acts of solidarity’ (Bickes *et al.*, 2014, p. 440). This description may not foster a unifying force but instead exacerbate economic fears and contribute to further division between the two countries, as Charteris-Black (2004, p. xii) pointed out that it did not bring the world together while driving it further apart.

PERCEPTIONS metaphor

Example 1. Simply put, if policymakers get the price *signals* right, firms and consumers will of their own accord reorient their efforts away from consumption and towards exports and cleaner energy. [ECONOMIC IDEAS ARE PERCEPTIONS] (A1)

Example 2. Anxiety about deflation remains justified: any *sign* of it would require much bolder measures from the central bank. However, for the moment the Fed has sent the right *signal*: concern but not panic. [ECONOMIC IDEAS ARE PERCEPTIONS] (A7)

According to Croft and Cruse (2004, p. 2), the cognitive abilities utilized in language production and comprehension are not significantly distinct from those employed in ‘other cognitive tasks, such as visual perception’. Language represents a unique ‘human cognitive ability’ (Croft and Cruse, 2004, p. 2). Within language usage, people can employ metaphors to map their specific ‘ideas’ and their distinctive ‘perceptions of the world’ (Charteris-Black, 2004, p. 11) onto linguistic expressions within the domain of PERCEPTIONS. Thus, PERCEPTIONS metaphors can provide valuable ‘insight’ and foster shared understanding among readers. They played an essential role in shaping ‘opinions’ and facilitating ‘persuasive discourse act’ (Charteris-Black, 2004, p. 13). By employing PERCEPTIONS metaphors, economic concepts put forth by American policymakers and economists are illustrated to capture people’s attention. This may indicate that America’s economy is exploring ways to recover and continue its economic development. The concept of PERCEPTION refers to the outcome of perceiving or observation; it is associated with awareness and cognition. PERCEPTIONS metaphors do not simply imply retinal contact but rather signify ‘becoming aware through vision’ and knowing ‘what is whereby looking’ through sight (Lakoff, 1991, p. 88). This implies that they are not merely relevant to our visual capacity (Lakoff, 1991, p. 88) but also involve using sight or directing our gaze towards something to become aware of certain ideas; thus, noticing information, gaining insights or realizing/comprehending some ideas.

In the PERCEPTION metaphor type, the corpus words that occur the most frequently in my data are *signals* and *signs* (6 occurrences). The sub-metaphor formula ‘Aids to Gaining Awareness are Aids to Vision’ (Lakoff *et al.*, 1991, p. 86) is employed in the previous two examples. Although there are no physical sign or signal objects like signal bombs or lamps being sent to firms or consumers, policymakers direct their attention towards price information, like how vision guides one’s awareness of surroundings and enables them informed and profitable economic decisions. Within the context of PERCEPTIONS metaphor, ideas or visions can be represented by economic plans, policies, decisions, activities or trends. In my data analysis, firms consistently pay heed to policymakers’, particularly President Obama’s and central banks’, including the Federal Reserve’s *sign* or the *signal* regarding the dollar. For instance, in ‘Its firms might be more willing to spend their cash if they had a clearer *sign* from Mr. Obama how he intends eventually to close their country’s fiscal deficit (and the extra taxes that might entail) (A7). These resonate with the previously mentioned PEOPLE metaphor where firms and businesses eagerly await *signs* from policymakers indicating appropriate economic

directions during post-economic crisis periods. From these examples, both firms and consumers rely on policymakers' *signals* while also highlighting that Fed releases accurate *signs* as reassurance against anxiety or panic. This not only boosts confidence within economic markets but also cultivates an image of responsible policymaking alongside a credible central bank presence. The PERCEPTIONS metaphors effectively convey that when the policymakers implement specific economic measures it significantly impacts and influences firms' and customers' economic activities.

LOCATION metaphor

Example 1. Unemployment *remains* very high in much of the developed world, including America. [ECONOMIC STATES ARE LOCATIONS] (A13)

The domain of LOCATION is frequently observed in Lakoff's List (1991). In my data, the metaphorical expression *remain* is the most prevalent (6 occurrences) among LOCATION metaphors describing American economy. It is a typical word in Lakoff's List (1991) under the metaphor STATES ARE LOCATIONS, exemplified by sentences such as 'She can *stay/remain* silent for days.' and 'He *remained* standing.' (1991, p. 8). In Example 1, the economic situation is depicted as an object striving to maintain its location or position unchanged, to remain in a fixed place; thus, mapping ECONOMIC STATE onto the domain of LOCATION. In this example, 'unemployment' in developed countries including America maintains its 'high' position which hampers American economic development. Other entities described using *remain* in my data encompassed aspects like 'private sector, loans and housing boom', all of which persist at elevated levels signifying negative implications for America's economy, whereas 'municipal defaults' *remain* low indicating positive outcomes.

Example 2. American housing would, unfortunately, still have lots of *props*—agencies such as the Federal Housing Administration and subsidies like tax relief on mortgage interest. [ECONOMIC EXISTENCE IS A LOCATION (HERE)] (A6)

The verb *prop* denotes the act of providing 'support by placing something under or against' an object. It is commonly used in conjunction 'with up' (see <https://www.merriam-webster.com/dictionary/prop>). In this context, *prop* implies that American housing can maintain its position and has received substantial support from various agencies. This usage aligns with the example 'The anti-war movement needs your

support.' in Lakoff *et al.*'s (1991, p. 70) where the verb *support* signifies holding or sustaining a location up, thus categorizing *prop* as LOCATION UP metaphorically. Consequently, it adheres to the metaphorical formula ECONOMIC EXISTENCE IS A LOCATION (HERE) – ECONOMIC EXISTENCE IS LOCATION UP HERE - Maintaining Economic Existence is Maintaining Location Up (Lakoff *et al.*, 1991, p. 70). The most frequently occurring corpus words associated with this metaphor type are *prop* and *support* (5 occurrences), both indicating the sustenance or maintenance of a location in an elevated position through underlying or opposing means. Therefore, these metaphor words map the existence of economic situation, entity or phenomena onto the domain of LOCATION UP. If an economic phenomenon fails to exist, it can be likened to lacking support and being unable to maintain its elevated position here. While Lakoff's List (1991, p. 70) conventionally includes *support* for this metaphor type, introducing the synonymous term *prop* adds novelty.

Compared to frequent usage of *emerge* and *sustain* in LOCATION metaphors depicting China's economy in the previous chapter, which possibly reflects its newly emerging image while also accompanied by doubts about its sustainability, the LOCATION metaphors employed here present a conservative portrayal of America's economy. They suggest that the United States is striving to uphold its superior position above and dominant economic status while mitigating the impact of the financial crisis.

BODY metaphor

Example 1. With housing showing renewed *weakness*, that number may rise.

[HOUSING MARKET IS A BODY] (A6)

BODY metaphor is frequently observed in numerous studies on economic discourse, such as the conceptualization of ECONOMY IS AN AILING BODY, BODY HEALTH and BODY EXPERIENCES (see Lederer *et al* 2017; Boers and Demecheleer 1997; Shenker Osorio 2012; Gao, 2016, p. 2636-2637). In relation to the economic crisis, this metaphorical framework has been employed to depict the 2008 crisis as a bodily affliction in Horner (2011) and Slintáková (2010), while nineteenth-century economic crises have been portrayed as a DISEASE afflicting the BODY in Besomi (2011). Many concepts describing economic activities are deeply 'rooted in our own' embodied 'experiences of physical 'action' (Gibbs, 2006), which aligns with the notion of "embodied cognition" within cognitive science (Gibbs, 2018, p. 351). In this study, the American society and its

economy is mapped onto the BODY domain to assess its *body strength* as *weak* or *strong*. According to Arrese and Vara-Miguel (2016, p. 133), as expected for maintaining a ‘healthy economic body’ and preventing contagion effects, some necessary policies were implemented including ‘austerity measures and structural reforms’ within ‘labor markets’. Similarly, the strength of America’s economy may influence its further economic policies, trends and status.

The metaphor corpus in the BODY domain reveals that words representing WEAK and STRONG concepts are frequently used to depict America’s economy. Different perspectives or industries are compared to a body, adopting the sub-metaphor ECONOMIC FITNESS IS PHYSICAL FITNESS (Lakoff *et al.*, 1991, p. 80). A STRONG and HEALTHY economy is described when it is in good condition, as indicated by metaphor corpus words such as *strong*, *strongly*, *strength* or *return to health*. Conversely, a WEAK economy is depicted using words like *weak* or *weakness* (see Table 16 in Section 5.2.2). In Example 1, the housing market is portrayed as *weak* while other economic aspects such as America itself, its private sector and car firms are described as suffering from financial *weakness* (A1, A10), with its car industry stated to ‘never *return to health* unless the global demand changes’ (A14, Appendix A). These portrayals carry negative connotations for the US economy and suggest that ‘something wrong is going on’ with it (Arrese and Vara-Miguel, 2016, p. 146). However, not all information implies economic downturns; there are positive aspects too. In ‘Consumers in the big emerging markets are gaining confidence, and export industries in places like America are feeling *stronger*.’ (A13), the word *strong* indicates economic fitness. Additionally, American has ‘regained its poise’ and is described as *strong* (C11) as well. The BODY metaphors may indicate that after ‘the financial crisis hit’ (A1), America paid special attention to its economic situations just like a person recovering from illness take care of their body and health. In addition, the *weakness* observed across different aspects of American economy may conceptualize the nation as an innocent ‘victim rather than an offender’ within the context of the financial crisis (Bickes *et al.*, 2014, p. 432, 439; Charteris-Black, 2004, p. 16, 151).

Example 2. If the CRA was largely irrelevant, and Fannie and Freddie were also-rans, it seems hard to understand how one could put government at the *heart* of the crisis.
[ECONOMIC CRISIS IS A BODY] (A8)

In addition to bodily sensations and the physical fitness conditions of *weak* or *strong*, body parts are found in the data in BODY metaphors. In the example, the economic crisis

can be metaphorically associated with the *heart*, a vital organ in a body. This mapping of the concept of ECONOMIC CRISIS onto the domain of BODY is similar to the metaphorical representation of SOCIETY IS A BODY, which involves linking ‘heart’ as a ‘central element of society’ (Lakoff *et al.*, 1991, p. 211). In Example 2, *heart* is used to refer to the central element of the global economic crisis. The phrase *heart* of the crisis draws readers’ attention to debates surrounding who should be held responsible for problems in housing market that led to a global financial crisis - whether it is appropriate to blame government actions such as Community Reinvestment Act (CRA) or government-sponsored enterprises (GSEs) like Fannie and Freddie who pursued profit-drive strategies as described as ‘goose profits’ (A8). By juxtaposing the metaphorical expression with ‘government’ with this metaphorical expression, metaphors serve their purpose by highlighting and hiding (Lakoff and Johnson, 1980, p. 62). Thus the ‘government’ becomes prominent while from the sentence we know it is hardly or should not be blamed. Hence the image of the government is excluded or shifts away (Bickes *et al.*, 2014, p. 440) from the blame or suspect of being responsible for the crisis.

LIQUID metaphor

Example 1. Then there is the free-rider problem: the cost of litigation falls on those that sue, but the proceeds from putbacks *flow* to all investors. This increases the incentive to wait for someone else to act. [MONEY IS A LIQUID] (A12)

In this case, the concept of money as a LIQUID that can *flow* is utilized through the sub-metaphor ‘Gain of Money is Movement of a Liquid’ (Lakoff *et al.*, 1991, p. 183). This metaphor aptly portrays cash or profits as fluid entities capable of flexible movement (Chow, 2010, p. 117), highlighting the unpredictable, uncontrollable and flexible direction of the money *flow*. The example provided resonates with the news title ‘American Mortgage Mess’ which reports on the increasing number of ‘private investors hope to sue BofA’ (A12). However, these investors may face challenges highlighted in the example where putbacks will be distributed as described as *flow* to all investors while only those who file lawsuits bear litigation costs. Consequently, some investors may choose to wait for others to take action instead. The depiction reveals the mess or chaotic consequences caused by mortgage and debts issues in the American housing market, along with investor anxiety and banks’ difficulties, ultimately leading to conflicts between banks and investors.

Example 2. Then, bosses of American car companies wondered if their firms would survive. Now, thanks to \$60 billion of federal finance and the *cold shower* of bankruptcy to *wash away* their debts, General Motors (GM) and Chrysler are still alive, while Ford's canny financial manoeuvring before the crisis allowed it to clean up its act and roar back to record profits. [MONEY IS A LIQUID] (A14)

MONEY IS A LIQUID (Lakoff, 1991, p. 183) is a conventional metaphor in economic discourse, because different forms of money such as cash, capital, investments and debts usually occur in economic discourse. In this example, the federal finance and the financial state of 'bankruptcy' are metaphorically depicted as flowing liquid that can potentially alleviate described as *wash away* debts like a refreshing *cold shower*. This brings positive news for American car firms who have been adversely affected by the ongoing economic crisis. The application of the LIQUID metaphor signifies the need for rejuvenation through specific economic measures outlined in the news article. However, it is important to note that describing this economic activity as an unpleasant event or shock with reference to a *cold shower* suggests that American auto companies are currently facing significant challenges and emerging from bankruptcy—a passive and infrequent transformation.

The use of LIQUID metaphor in economic discourse is not uncommon, and it has also been employed to describe the Chinese economy as discussed in the previous chapter. In portraying the Chinese economy, both positive and negative LIQUID metaphors were utilized, such as 'Chinese cars will *flood* into American and European markets' and '*erode* the return on capital'. However, the two examples presented here that depict the US economy are predominantly negative. Notably, American car companies could only survive through a harsh *cold shower* of bankruptcy, which starkly contrasts with how the car industry portrayed in China.

The ten most frequent metaphor types analyzed quantitatively and qualitatively in these two sections account for over fifty percent of the metaphorical expressions. These metaphors have played a crucial role in shaping the conceptual images of various aspects of America's economy. In this section, I will provide a summary of the findings based on the 3 Ts measurement (Type, Tell, and Tone) introduced in Section 1.4. Since it is necessary to compare the metaphor types describing American economy with those discussed in the previous analytical chapter on China's economy in the discussion and conclusion chapter, my focus here will be on *Tell* and *Tone* aspects of metaphors. In terms of the *Tell* by the metaphor expressions, the instances describe the roles played by economic entities and elements such as the country, its government, banks, firms, market,

money and economy itself. The recovery of America is portrayed as uneven and not yet reaching its pre-crisis peak (PHYSICAL PROPERTY). Similarly, Florida - representative of America in this context - also faces challenges in its recovery (SELF-PROPELLED MOTION). However, it is important to believe that the recovery will not come *to a halt* (SELF-PROPELLED MOTION) and that it will *recover* to be stronger and faster than anticipated (PHYSICAL INJURY). Despite China and Canada's economic growth, America still maintains a *larger* economy and must dedicate more effort towards development (PHYSICAL PROPERTY), while preserving its high economic status (LOCATION). Nevertheless, *dependence* on foreign savings hampers economic recovery (PEOPLE) and unemployment rates *remain* high within the country (LOCATION). Additionally, *attacking* and punishing unfair trade practices from countries like China becomes crucial for America's progress (WAR). Although the housing market, private sector, and car companies are still weak; rare opportunities such as the *cold shower* of bankruptcy may help these companies survive as by eliminating and *washing away* their debts (LIQUID), whereas export industries in America demonstrate *strength* (BODY). Firms exhibit *fearfulness* and *caution* (PEOPLE) relying on policymakers' *signals* along with those from central banks (PERCEPTIONS). The government seems unlikely to be blamed to bear responsibility for the global financial crisis (BODY); however, the Federal Reserve effectively conveys there is no need for anxiety or panic (PERCEPTIONS). Different forms of currency and investments receive significant attention, with cash serving as a *buffer* for the American corporate economy during challenging times (CONTAINER). The prediction of important commodity prices, such as American petrol prices, serves as an indicator for economic recovery *within* a short timeframe (CONTAINER). Tax credits and mortgage play a crucial role in sustaining the housing market to be *alive*; however, they are also attributed to the increase in debt levels (PEOPLE). Conflicts arise between banks and government-sponsored enterprises like Fannie Mae and Freddie Mac in America (WAR).

The *tone* reflects a combination of both negative and positive attitudes towards the American economy, portraying it as a 'victim' of the crisis in need of economic recovery (Bickes, 2014, p. 439). Negative metaphors such as PHYSICAL INJURY, weak BODY and hindered SELF-PROPELLED MOTION are employed to depict the economic perspectives of the housing market, car industries, private sectors, and high unemployment rates. These metaphors created an image of economic performance that has been significantly impacted by the financial crisis. However, despite these challenges, there is an underlying sense of optimism regarding the American economy's dynamism and power. It

possesses the potential for accelerated and robust *recovery* with substantial cash reserves intact while maintaining its position as a leading figure on the global economic stage. The discourse position reveals tendencies that, despite the mortgage crisis originating in America, it is not portrayed as ‘the trigger of the crisis’ (Bickes *et al.*, 2014, p. 427) in the telling through metaphor expressions; instead, it is depicted as a victim to ‘covertly’ establish ‘reader sympathy’ (Charteris-Black, 2004, p. 26). The government and policymakers are attributed ‘with heroic-like attributes’ and qualities such as trustworthiness, responsibility, and providing good guidance for companies and customers (Bickes *et al.*, 2014, p. 440). Internal conflicts within the country between central banks and GSEs like Fannie and Freddie ‘shift blame away’ from policymakers ‘for the crisis’ while external conflicts targeting foreign savings and punitive measures against China redirect ‘readers’ fears’ (Bickes *et al.*, 2014, p. 440) towards other countries. Consequently, the depiction of the ‘relationship’ (Bickes *et al.*, 2014, p. 440) between America and China does not imply ‘mutual support’ or ‘co-operation and solidarity’ but more of ‘rivalry’ (Chow, 2010, p. 56; Charteris-Black, 2004, p. 50; Straehle *et al.* 1994; Chilton 1996).

5.2.4 Modifications of Existing Metaphors

Among all the metaphor types describing American economy, six types of metaphor source domains are absent from Lakoff’s List (1991): STAGE, RELIGION, DISASTER, BUBBLE, SOUND and GAMBLE. The first two belong to the ORGANISM metaphor category while the next three falls under NATURAL category and the last one is categorized as GAME. These six metaphor types have been previously investigated by other researchers (Arrese and Vara-Miguel 2016; Charteris-Black 2004; Álvarez-Peralta 2014; Bickes *et al.* 2014; Horner 2011; Arrese 2021). Similar to Section 4.2.4 discussed earlier, they are further compared with relevant research conducted by others. Although most of these metaphor types appear only once or twice in metaphors depicting America’s economy, they hold significant research value as already discussed in Section 4.2.3. These metaphor types not found in Lakoff’s List (1991) along with their respective categories have been presented in Table 12 of Section 5.2.1 highlighted in green color for easy reference purposes. Similarly to Section 4.2.4, these recent metaphor types relevant to American economy found within my data are qualitatively analyzed and exemplified.

STAGE metaphor

Example Yet a lot of people seem to be seeking for a way to claim that government

distortion of the real-estate market *played a key role* in this crisis, even though the evidence shows that what changed was not government, but financial markets. [WORLD ECONOMY IS A STAGE] (A8)

The STAGE metaphor type (6 occurrences) is a modification of a metaphor previously identified by Arrese and Vara-Miguel's (2016) study, as discussed in Section 4.2.4. In this example, the global financial crisis is conceptualized as a stage, where countries worldwide are depicted as players with distinct roles and performing on the global economic stage. The STAGE metaphor highlights the American government as a significant figure responsible for causing the crisis. Additionally, the PERCEPTIONS metaphor is also present in this sentence through the use of the corpus word *show*. This employs the IDEAS ARE PERCEPTIONS concept (Lakoff *et al.*, 1991, p. 86), directing readers' attention towards recognizing that 'financial markets change' constitutes the actual reason rather than the government intervention. Similar to this provided example, several sentences using the STAGE metaphor within my data co-occur with PERCEPTIONS metaphors, focusing on discussing various reasons behind the crisis occurrence. For instance, sentences like 'Meanwhile, the government intervention that everyone agrees *played a major role*, the Fed's decision to keep interest rates unusually low, doesn't seem to be the **focus** of the argument that the government is responsible for the crisis.' (A8) and 'Others **focused** not **on** the CRA story, but on *the role played by* Fannie Mae and Freddie Mac in promoting homeownership' (A8) reveal how financial reporters aim to draw attention towards assigning blame appropriately. Furthermore, within my data, factors such as housing price collapse, global inequality issues along with government-sponsored enterprises" (GSEs) like Fannie Mae and Freddie Mac have been mentioned as potential causes for this crisis; however, the sample example may reveal that while some people attribute responsibility to governmental actions or interventions for triggering economic crises events - it may not reflect a real case.

RELIGION metaphor

Example *Paradise* foreclosed - The boom has left Florida with an excess of houses, shops and debt. [ECONOMIC SITUATION IS RELIGION] (A5)

Arrese and Vara-Miguel's (2016, p. 155) categorized generalized corpus words related to religious and magical concepts, such as '*monster*' and '*ghost*', under the category of ORGANISM due to their representation of spiritual believes encompassing religious

values, sacred matters, supernatural beings or phenomena unique to human. Gao (2016, p. 2632) identified RELIGION metaphors associated with ‘the superior religion in Britain and the Christian classic Bible’ that are ‘based on western culture’ within economic news headline (Gao, 2016, p. 2637). Charteris-Black discussed ‘religious metaphors’ (2004, p. 176) including descriptions from the Koran such as paradise in religious discourse (2004, p. 236). The data analyzed in this research also include metaphors representing spiritual concepts like PARADISE which relate to religious values or MAGIC which involve the supernatural when describing the American economy; these metaphors are classified under the semantic category of RELIGION and considered a modification of existing metaphor types. However, they do not occur in my Chinese economic data descriptions.

The example is in the headline of the news article, which presents the most prominent and attention-grabbing information. Florida has a rich ‘history of property booms’; however, ‘prices’ have experienced a significant decline of ‘40-50% from their peak’ (A5). The economic situation during the real estate boom in Florida is metaphorically depicted as PARADISE, while subsequent price falling resulting in economic losses after subprime excesses is described as *paradise* foreclosed. Similarly, in reference to ‘THE giant iron gates are *eerily* reminiscent’ [GATES ARE MONSTERS], the news portrays the gates of abandoned residential developments as *eerily*, symbolizing ‘when the American housing market collapsed’ (A5), as monster like image that evoke the feeling of mysterious, wield and scary. Thus these metaphors in the news disseminate feelings of loss and disappointment while associating the mortgage crisis with profound negativity. The US economy is portrayed as a victim yearning for nostalgia for past glories while considering the crisis as dreadful spiritual attacker.

DISASTER metaphor

Example The American rescues averted *catastrophe*, but they—along with continued European subsidies—have exacerbated the overcapacity that has dogged the sector for years. The car industry can produce 94m cars a year, against global demand of 64m. Unless that changes, it will never return to health. [ECONOMIC DIFFICULTY IS DISASTER] (A14)

The metaphor type of DISASTER has been previously identified by others (Charteris-Black 2004; Álvarez-Peralta 2014; Blickes *et al.* 2014; Horner, 2011), indicating its existence as a modification of existing metaphors rather than a novel metaphor type. The economic crisis affecting the car industry is likened to a *catastrophe*, mapping the

economic difficulty onto the description of violent and destructive natural events. Thus, the economic difficulty is mapped onto the concept describing violent and destructive natural event. Another example employing the DISASTER metaphor can be found in ‘The evolution of this story leads me to believe that what’s happening here is that many people who hold laissez-faire economic views an extremely difficult time accepting that markets can behave in a collectively irrational and *disastrous* fashion without any kind of government intervention’ (A8). Similar to how Chinese market conditions are described, DISASTER metaphors used to depict the American economy could also be categorized as NATURAL DISASTERS. However, in both examples utilizing the DISASTER metaphor, America and its government are portrayed as helpers rather than victims.

BUBBLE metaphor

Example By contrast, imbalances have been a recurrent theme of Barack Obama’s. His speeches often sermonized about the evils of *bubbles*, easy credit and borrowing from China. [ECONOMY IS BUBBLE] (A1)

The metaphor type of BUBBLE has already been identified by Arrese (2021) as mentioned in Section 4.2.4. In the given example, President Obama is not addressing bubbles in people’s everyday lives but rather referring to an economic *bubble* as a metaphorical concept. The term *bubble* denotes a fragile and easily breakable thin film of liquid filled with gas. By mapping the domain of ECONOMY onto the concept of BUBBLE, it emphasizes the delicate nature of the economy. Utilizing the BUBBLE metaphor captures people’s attention towards recognizing that the economy is delicate and requires careful handling. However, unlike its association with Chinese economy described earlier, here in this sentence’s context, it appears that blame is directed towards economic bubbles themselves rather than specifically targeting the American economy. Additionally, China is mentioned as one of the factors contributing to economic imbalances in conjunction with the evil *bubbles*. The use of BUBBLE metaphors can also be observed in previous analytical chapter describing China’s economy negatively alongside America’s economy. This study is not designed to discuss the real causes for economic impacts; however, how both American and Chinese economies are metaphorically depicted were generalized and compared using various metaphor categories and types within the discussion and conclusion chapter.

SOUND metaphor

Example The mortgage parallel - Nerves *jangle* again in a huge and supposedly stable market. HABITUALLY seen as safe, America's \$2.8 trillion municipal-bond market was rocked in the crisis of 2008. Now a sudden jump in yields has renewed fears that the main source of finance for America's 50 states and thousands of towns and cities is ripe for a crisis all of its own. [ECONOMIC FEAR IS LOUD SOUND] (A11)

Metaphors related to SOUND, such as *economic boom*, were previously identified by Chow (2010), indicating that these metaphor types are not novel but rather modifications of existing metaphors. In this specific example, the term *jangle* signifies the production of 'a harsh or discordant ringing sound'. The usage of this metaphorical word in the context conveys the emotion of fear regarding a potential recurrence of crisis following the 2008 financial downturn within the SOUND domain. Subsequent content in the news articles explains that 'Higher rates often signal higher default risk'; however, 'There is no sign of that yet' (A11). Additionally, various security measures are outlined to help 'investors' differentiate between 'prudent' and 'profligate practices', with similar measures already implemented in 'California, New York, and Illinois'. Diverging from China's economy where SOUND serves as a symbol for economic prosperity, this SOUND metaphor assumes an alarming tone and portrays warnings about American economic state.

GAMBLE metaphor

Example Bond insurers, who used to cover roughly half of the market, have retrenched or gone bust after making bad mortgage *bets*. Investors depend on credit ratings, given municipal borrowers' lack of transparency. But faith in these scores has dwindled since the subprime crisis. [ECONOMIC ACTIVITY IS A GAMBLE] (A11)

The GAMBLE metaphors, including terms such as *gamble* in British news articles and 赌注 (bet) in Chinese news articles, were identified in Chow (2010, p. 373, 432) as recreational yet risky activities (Gao, 2016, p. 2633), which can be categorized under the concept of GAME (Chow, 2010, p. 83). These GAMBLE metaphors serve to emphasize the ambition for excellence and a leading role within the business world (Gao, 2016, p. 2633). This example is extracted from a news article discussing the impact of the subprime crisis on the US municipal-bond market. In this instance, bond insurers' investments in mortgages are likened to be bets or gambling; however, these *bets* are portrayed negatively

as being bad and risky. Consequently, highlighting the adverse effects on the American bond market and reflecting a cautious attitude towards debt to prevent another potential crisis from arising later. Nevertheless, the tone may not be serious and there is an element of playfulness associated with these gambling game-like *bets*.

5.3 Summary

Similar to the analysis of Chinese economic metaphors in the previous chapter, this chapter employed the metaphor categorization methods proposed by Arrese (2015) and Arrese and Vara-Miguel (2016), with appropriate modifications for studying economic metaphors related to American economy. A total of 130 types of metaphors were identified from the language data and categorized into seven categories - MECHANICAL, ORGANISM, JOURNEY, WAR, NATURAL, DISEASE and GAME (in descending order based on frequency). In comparison with previous relevant research on economic metaphors in financial reporting from *The Economist* and other news media describing European countries during financial crisis as well as the selected data in my study pertaining to America, notable distinctions are observed. Specifically, while the DISEASE category was most frequently used when describing European countries in *The Economist* and other news media sources, the MECHANICAL category takes precedence when characterizing America's economy in *The Economist*. Additionally, JOURNEY metaphors are exclusively found in descriptions of the American economy but not those depicting European countries. This suggests that the American economy is conceptualized as more robust than EU economies; despite being affected by financial crises and facing conflicts alike, it exhibits greater potential for swift recovery.

The ten most frequently employed economic metaphors in describing American economy are PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, PEOPLE, PHYSICAL INJURY, WAR, BODY, PERCEPTIONS, LOCATION and LIQUID (in descending order of frequency). These dominant conventional metaphors account for fifty-two percent of all metaphors used to describe the American economy and form the foundation of its metaphorical imagery. These ten metaphor types appear most frequently across almost all seven superordinate categories except for the least common metaphor category of GAME. The metaphor categories MECHANICAL and ORGANISM encompassing the highest number of metaphor types consist of two and four frequent metaphor types respectively (refer to Table 12 in Section 5.2.1). Through quantitative and qualitative analysis of these metaphors, it is evident that the American economy is depicted as experiencing numerous ups and downs during financial crisis while remaining *large* as

maintaining a significant presence (PHYSICAL PROPERTIES). Despite facing obstacles, there is an expectation that the economy can recover from deep recessions within a specific timeframe (SELF-PROPELLED MOTION, CONTAINER). The nation as PEOPLE should be *independent* while firms as PEOPLE need to overcome *fearfulness*. Any PHYSICAL INJURY inflicted on its *weak* BODY will soon *recover*. Entities such as Fannie Mae and Freddie Mac blamed for causing mortgage crisis along with countries like China require aggressive action as need to be *attacked* (WAR). The government is portrayed as responsible and reliable in providing appropriate economic *signals* within market dynamics (PERCEPTIONS). Furthermore, despite encountering challenges such as high unemployment rates, America's economic status *remains high* (LOCATION), supported by substantial cash *buffer* (CONTAINER). Collectively these expressions generate an image of a wounded yet strong country with an optimistic outlook on its economy.

Six metaphor types that were not identified in Lakoff's List (1991) but have been discussed in recent relevant studies, including STAGE, RELIGION, DISASTER, BUBBLE, SOUND and GAMBLE, are employed to describe the American economy in the data. Among these recent metaphors, the role of American government has shifted away from being a key factor in the mortgage crisis (STAGE) instead portraying America as a savior that successfully averted an economic catastrophe (DISASTER). The PARADISE metaphor reflects people's nostalgia for the pre-crisis era of economic prosperity. The detrimental effects caused by evil *bubbles* are highlighted and depicted as *sounding an alert* to the stability of the American economy (SOUND). Market faith has declined since the crisis due to risky mortgage *bets*. However, while the BET metaphor does not convey serious consequences explicitly, it may reveal a playful tone when describing experiences with financial games.

Several negative metaphorical expressions are employed to portray the American economy. However, when considered in conjunction with the contextual sentences and background information from news sources, these metaphors serve to demonstrate that the American government is reliable and that its economy remains in a favorable position with a decidedly positive outlook, despite being visibly impacted and wounded by the mortgage crisis. In the subsequent chapter, I compare all of the metaphor categories and frequently used metaphors analyzed in this section pertaining to the American economy with those associated with China's economy.

Chapter 6 Discussion and Conclusion

6.1 Comparison and Findings

This study investigates the metaphorical descriptions of China's and America's economies, focusing on metaphor categories, the most frequent types, and recent modifications of existing metaphors. The essence of metaphorical systematicity in discourse lies in its ability to 'highlight or hide' certain aspects of a concept, allowing us to emphasize one aspect while disregarding others within metaphorical mappings (Ungerer and Schmid, 2006, p. 160; Lakoff and Johnson, 1980/2003, p. 10). In economic news articles, journalists often employ metaphorical language to convey ideas effectively by drawing readers' attention towards specific aspects (Lakoff and Johnson, 1980/2003, p. 10). Based on the analyses and comparisons of metaphorical descriptions in *The Economist* during the aftermath of the American mortgage crisis (April 2010-March 2011), this paper aims to address three research questions outlined in the introductory chapter, which are reiterated here:

- 1: What are the most frequent metaphors used to describe the Chinese and American economies in *The Economist* between 2010–2011?
- 2: Are there any differences between the way the Chinese and American economies are metaphorically depicted?
- 3: If there are differences what do these indicate about the ideological position of *The Economist* towards these countries?

The three research questions are addressed through the analysis and evaluation from perspectives of Type, Tell and Tone of metaphors in the data by their types, the way in telling and whether they are animate or inanimate metaphors or in positive or negative tones in association with context. From the compared examination, metaphors in *The Economist* in this data did not totally frame the Chinese and American economies unilaterally and homogeneously (Arrese, 2016, p. 134; Chow, 2010, p. 2). Instead, there exist both similarities and differences in metaphor categories and the most frequent metaphor types in describing the two countries' economies. The following would illustrate these similarities and differences at various levels and perspectives.

Despite the distinct social, cultural, and economic characteristics of both countries, the metaphorical categories employed to describe their economies exhibit unexpectedly similar types and rankings. This observation is substantiated by the comparative analysis presented in Table 17 below. The bold entries in Table 17 highlight quantitative disparities based on rankings and percentages in metaphorical categories between Chinese and

American economies as depicted in selected articles from *The Economist*.

Table 17 Distribution of metaphor categories describing the Chinese economy and the American economy in *The Economist*

Metaphor categories in <i>The Economist</i> describing Chinese economy	Frequency and percentage	Metaphor categories in <i>The Economist</i> describing American economy	Frequency and percentage
MECHANICAL	164; 46.1%	MECHANICAL	384; 39.5%
ORGANISM	83; 23.3%	ORGANISM	315; 32.4%
JOURNEY	59; 16.6%	JOURNEY	112; 11.5%
NATURAL	25; 7%	WAR	68; 7%
WAR	15; 4.2%	DISEASE	44; 4.5%
DISEASE	10; 2.8 %	NATURAL	43; 4.4%
		GAME	7; 0.7%

The presence of similar types of categories in the selected data from *The Economist* may suggest that both countries' economies are framed within 'dominant categories' prevalent in 'elite-to-elite communication processes' within 'economic discourse in the media' (Arrese and Vara-Miguel, 2016, p. 149). Thus, it becomes evident that "the news media has not been able to distance itself from specialized frameworks of analysis employed by experts and economic agents" (Arrese and Vara-Miguel, 2016, p. 151). From an ideological standpoint, these analogous metaphor categories may demonstrate how metaphors contribute to the language domination 'by those who hold power in society such as media barons' (Charteris-Black, 2004, p. xii, 29; Fairclough 1989). Overall, both Chinese and American economies appear stronger compared to other countries', particularly European economies during times of crisis as mentioned in Section 4.2.1 and 5.2.1 with fewer metaphors related to DISEASE and NATURAL categories but more associated with MECHANICAL category.

However, there are two notable distinctions in their ranking. Firstly, when characterizing the Chinese economy, the category of inanimate NATURAL metaphors ranks higher than WAR and DISEASE categories. According to Charteris-Black, 'inanimate metaphors' are typically employed to "describe economic processes when the text-producer does not claim to predict what will happen" (2004, p. 72). This disparity in metaphor categories reveals that China's economy is characterized by unpredictability and distance from news text-producers. Additionally, the GAME category is exclusively utilized to depict the American economy. Nevertheless, when compared with depictions of China's economy, WAR and DISEASE metaphors outweigh NATURAL metaphors in

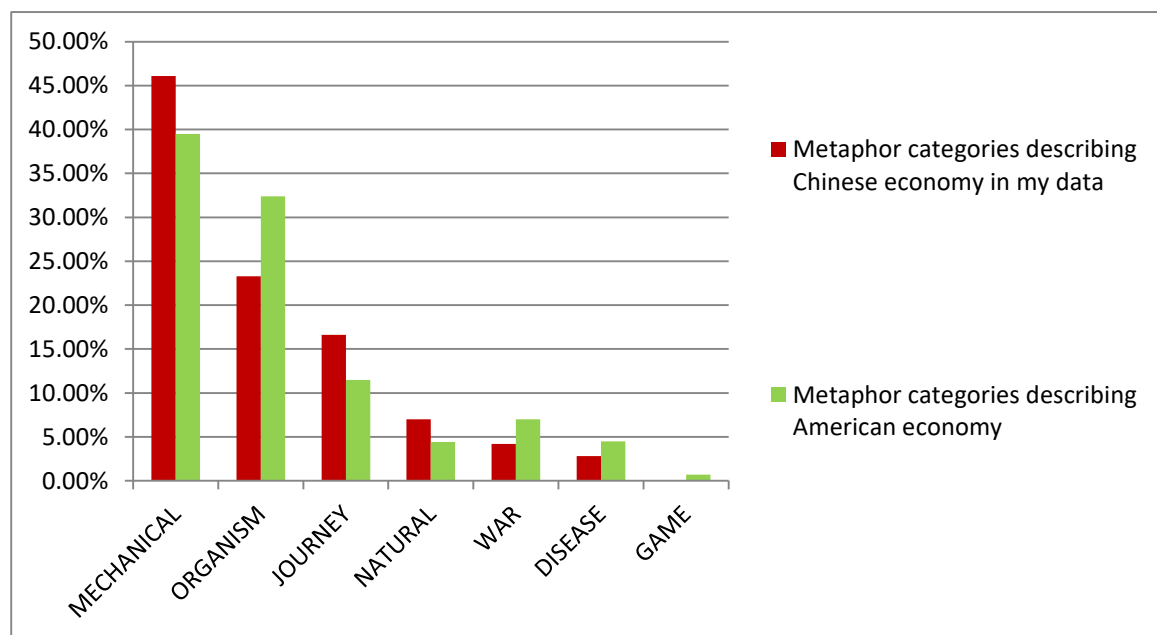
describing the U.S. economy. The elevated ranking and percentage of WAR metaphor category aligns with “the role of metaphors in forming and underpinning economic ideology” while conceptualizing a ‘capitalist economy’ characterized by ‘conflicts’ which is ‘central’ to its ‘metaphor system’ (Charteris-Black, 2004, p.167). Moreover, DISEASE metaphor may imply challenges faced by the American economy. Furthermore, both DISEASE and NATURAL metaphors place less emphasis on government or corporate ‘responsibility’ (Arrese, 2015, p. 31), attributing economic crises primarily to ‘external’ factors ‘as something that infects us’ (Arrese, 2015, p. 31). Thus, DISEASE metaphor may alleviate any sense of guilt if difficulties arise within the American economy (Bickes *et al.*, 2014, p. 244). In a similar vein, the higher ranking of NATURAL category in China’s economy may not attribute economic development solely to effective measures implemented by policymakers or companies, but rather some external factors influencing it positively or negatively. Furthermore, *The Economist* portrays the American economy at a certain ‘distance’ by through its use of GAME category as a metaphorical representation which does not pose an ‘ultimate danger’ (Bickes *et al.*, 2014, p. 440). However, when discussing the Chinese economy, ‘a more distant’ and less emotional perspective is adopted to such an extent that it does not even fall within the GAME (Bickes *et al.*, 2014, p. 427). This discrepancy in metaphor categories also suggests a relatively closer discourse position towards the US economy compared to China’s economy and places greater emphasis on US participation in economic activities.

Furthermore, differences in percentages are noteworthy: while MECHANICAL, ORGANISM and JOURNEY categories rank similarly in describing both economies based on the data analysis results presented in Table 17; the conceptualization of the Chinese economy leans towards higher proportions of MECHANICAL and JOURNEY metaphors, whereas the characterization of the American economy exhibits a higher percentage of ORGANISM metaphors. Once again emphasizing ‘the unpredictability’ conveyed by the ‘inanimate MECHANICAL metaphor system’ when describing Chinese economy, this contrast highlights ‘the predictability of economic processes’ depicted through the ‘animate ORGANISM metaphor system’ when characterizing American economy (Charteris-Black, 2004, p. 249). Additionally, JOURNEY category may signify China’s ongoing developmental trajectory. Overall, these categorizations suggest that China’s economy is portrayed as having a more robust and vigorous development, while the ideological discourse position appears to be more detached from it.

Additionally, a cluster graph illustrating metaphors exclusively pertaining to the Chinese and American economies in my study for comparative analysis (Figure 13 below),

similar to Sections 4.2.1 and 5.2.1, is hereby incorporated herein for enhanced readability.

Figure 13 Distribution of metaphor categories describing the Chinese economy and American economy in *The Economist*



According to the bar chart, there is an overlap of six out of seven metaphor categories depicting the Chinese and American economies, indicating a unilateral framing of these two economies (Arrese, 2016, p. 134). The higher percentages of MECHANICAL and JOURNEY categories in both Chinese and American economies, along with lower percentages of NATURAL, WAR, and DISEASE categories suggest energetic recovery or development in both economies with less impact from natural elements, war or disease. The longer bars representing ORGANISM categories in both economies indicate metaphorical depictions derived from diverse and complex source domains (Arrese, 2014, p. 29). However, differences arise as more metaphors appear in the inanimate categories including MECHANICAL and NATURAL when describing the Chinese economy compared to DISEASE metaphors used for characterizing the American economy. In terms of animate categories, JOURNEY metaphors have a higher percentage in depicting the Chinese economy while ORGANISM, WAR and GAME metaphors are more prevalent in portraying the American economy. These contrasts seem to suggest that the American economy faces more intricate economic situations and challenges during its recovery from the economic crisis according to news producers' predictions (Charteris-Black, 2004, p. 72).

Moreover, it is noteworthy that the presence of similar metaphor categories does not necessarily imply identical metaphor types within those categories. The data reveals

variations among metaphor types within these categories. To investigate the metaphor types in the data, I have discussed the ten most frequent metaphor types. A comparison of these top ten metaphor types used to describe Chinese and American economies is presented in Table 18 below.

Table 18 Ten most frequent metaphor types in describing Chinese economy and American economy

SOURCE DOMAINS in Describing Chinese Economy	Frequency(F), Range(R), Ratio (percentage)	SOURCE DOMAINS in Describing American Economy	Frequency(F), Range(R), Ratio (percentage)
1. PHYSICAL PROPERTIES	F=76 R=10 21.2%	1. PHYSICAL PROPERTIES (MECHANICAL)	F=140 R=17 14.4%
2. CONTAINER	F=22 R=8 6.1%	2. CONTAINER (MECHANICAL)	F=68 R=16 7.0%
3. SELF-PROPELLED MOTION	F=20 R=9 5.6%	3. SELF-PROPELLED MOTION (ORGANISM)	F=58 R=13 6.0%
4. LANDSCAPE WE MOVE THROUGH (JOURNEY category)	F=14 R=7 3.9%	4. PEOPLE (ORGANISM)	F=55 R=12 5.7%
5. PEOPLE	F=13 R=7 3.6%	5. PHYSICAL INJURY (DISEASE)	F=41 R=12 4.2%
6. MACHINES (MECHANICAL category)	F=11 R=7 3.1%	6. WAR (WAR)	F=36 R=7 3.7%
7. LOCATION	F=11 R=6 3.1%	7. PERCEPTIONS (ORGANISM)	F=29 R=10 3.0%
6. JOURNEY (JOURNEY category)	F=11 R=2 3.1%	8. LOCATION (JOURNEY)	F=28 R=13 2.9%
9. PLANTS (NATURAL category)	F=10 R=7 2.8%	9. BODY (ORGANISM)	F=25 R=12 2.6%
10. LIQUID	F=10 R=6 2.8%	10. LIQUID (NATURAL)	F=20 R=12 2.1%
Total	F=198	Total	F=500

	R=20 55.2%		R=20 51.5%
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The different metaphor types used to describe the Chinese and American economies are highlighted in bold in the table above. The ten most frequently employed metaphors account for over 50% of occurrences, indicating their salience in terms of frequency (Chow, 2010, p. 83). All these are more or less conventional metaphors in economic media discourse and form the metaphorical framework for the selected economic news articles. In terms of type distribution, six metaphor type (PHYSICAL PROPERTIES, CONTAINER, SELF-PROPELLED MOTION, PEOPLE, LOCATION, and LIQUID) are shared between both economies while four differ (LANDSCAPE WE MOVE THROUGH, MACHINES, JOURNEY and PLANTS for the Chinese economy; PHYSICAL INJURY, WAR, PERCEPTIONS and BODY for the American economy). This seems to suggest that there are more similarities than differences given the prevalence of similar metaphor types. Thus confirming “the power of conceptual metaphors to create shared frames” when interpreting ‘economic crisis’ (Arrese, 2015, p. 31). However, frequencies and proportions reveal that similar metaphor types only account for approximately forty percent each (42.4% for China’s economy and 38.1% for America’s), whereas different metaphor types make up sixty percent overall. This indicates that among seemingly similar frequent metaphor types, the proportion of differences is greater than that of similarities. This finding does not entirely align with previous studies which observed a high degree of similarity in using ‘these conventional metaphors’ across ‘countries and media’, such as Vara-Miguel (2016, p. 149) and Charteris-Black and Mussolff (2003) in their analysis on economic news reporting about Euro in British and German financial press. Therefore, it can be inferred that the metaphorical descriptions are constructed within similar dominant ideological metaphor categories to some extent, while they differ in their specific way of telling and in metaphoric tones (refer to Sections 4.2.3 and 5.2.3).

In addition, the metaphorical representation of China’s economy is categorized into MECHANICAL (MACHINES), JOURNEY (LANDSCAPE WE MOVE THROUGH and JOURNEY), and NATURAL (PLANTS), while America’s economy is depicted through metaphors of ORGANISM (PERCEPTIONS and BODY), WAR (WAR), and DISEASE (PHYSICAL INJURY). The choice of metaphors between ‘inanimate/mechanical’ and ‘animate/organism’ polarization in the delineation of Chinese and American economies reflects economic news ‘authors’ positioning themselves as ‘narrative commentators who describe’ Chinese economic ‘events’ with less ‘emotional’ involvement, while adopting an

‘expert’ analyst role to ‘predict’ American economic ‘events’ in a ‘persuasive’ manner that influences ‘evaluation’ of these events (Charteris-Black, 2004, p. 136; Arrese 2015; Arrese and Vara-Miguel 2016).

Qualitatively, as evidenced by the previous analytical chapters on the ten most frequent metaphor types and modifications of existing metaphors, China is depicted as an emerging market with uncertain sustainable development, while America is portrayed as injured but still a helper with an optimistic economic ‘outlook’ (Charteris-Black, 2004, p. 146). China’s economic development is seen as a powerful growth engine with abundant products and positive outcomes even after the mortgage crisis, whereas America is perceived to possess fundamental strength and inspire more business confidence soon. However, except in SOUND metaphors, there are few cheerful tones associated with China’s economic development, while injuries and sufferings caused by the crisis in China remain nearly invisible. Conversely, America receives a more encouraging tone regarding its recovery. China is delineated as an offender, complainer and economic manipulator while America is positioned as a victim and heroic savior within the covert ‘ideological beliefs’ (Charteris-Black, 2004, p. 129). China is viewed as a potential threat but not a more powerful cooperator despite its economic position becomes higher than before in the GDP ranking. This portrayal implies that *The Economist* may not be as objective as it claims when reporting on Chinese and American economies through metaphor conceptualizations. Its ideological discourse position appears to align closer to the American economy by considering it more of ‘us’, while viewing the Chinese economy as ‘them’ (van Dijk, 2006, p. 732; van Dijk 1998).

However, the metaphor expressions highlight the positive aspects of Chinese economic growth and shed light on the negative challenges faced by the American economy, such as unemployment, debts burden, frustration in the car industry, turmoil in the housing market and concerns about another potential recession. This suggests that the covert ideological perspectives conceptualized by metaphors in the selected news articles do not typically follow the ‘Us/Them polarization’ that hold ‘positive ideological attitudes and beliefs toward Us and negative toward Them’ (Hart, 2014, p. 3). *The Economist* is ‘likely to have a distanced point of view to both economies ‘since it is not directly involved in it’ and a ‘more distanced perspective’ and ‘less emotional’ or ‘in its position as an outsider’ when it comes to’ Chinese economy (Bickes *et al.*, 2014, p. 440).

The connotations derived from these metaphors may fail to bring these two countries – which hold top two positions in world GDP rankings - ‘closer together’ as cooperators or friends but rather contribute to ‘the manipulation of fear’ and ‘pull the two countries apart’

(Charteris-Black, 2004, p. xii). For instance, in both economies, the metaphorical representations primarily emphasize economic ‘outcomes’, such as prices going up and down, rather than focusing on the underlying economic ‘processes’ like sales transactions. Moreover, there is limited consideration given to effective measures for enhancing economic development or mitigating economic injuries when examining how the Chinese or American economy grows, experiences setbacks, or faces unsustainable development (Charteris-Black, 2004, p. 3). By competitively comparing and evaluating these outcomes, it can evoke a heightened state of ‘anxiety’ and conflicts rooted in a ‘competition ideology’ (Charteris-Black, 2004, p. 138). Conversely, emphasizing specific ‘economic’ procedures and ‘processes’ may foster mutual concern for ‘building’ the economy (Charteris-Black, 2004, p. 138) and facilitate cross-cultural learning from each other’s economic experiences to enhance cooperation despite differing cultural and social ideologies.

Overall, China’s and America’s economies are framed with similar ranking of metaphor categories lack of cultural and ideological variety and characterized by unilateral framing of the two economies whereas the ten most frequent metaphor types reveal that they are not totally depicted homogeneously. With the differences by types and the positive metaphors describing Chinese economy, seemingly the tone is more positive, which might lead readers to ignore harmful effect of the crisis on China’s economy and sympathize American economic injuries. But if associated with the context that metaphors are used, it is found out that the text-producers is more confident in America’s economic outlook while cast some doubt on China’s sustainable development. Among the economic entities involved including the government, companies and labor force, American policymakers are described as trustworthy guiders while China’s governments are depicted as money wasters. Between the two countries relations, in the conventional metaphorical descriptions, America is described as buttressed partially China’s development while China is targeted as a factor hindering its recovery. The Chinese economic growth is more positively described, however the economic outlook is unpredictable while the American outlook is believed to be more predictably optimistic. The selected discourse in *The Economist* may not be as objective as claimed while the ideological attitudes are not typically biased either.

6.2 Contributions, Limitations and Suggestions for Further Research

I will end this thesis with contributions in the field both in terms of theory and most importantly in methodology. Limitations of this study and suggestions for further research

are also provided.

This thesis integrates cognitive linguistic theories, specifically conceptual metaphors and categorizations, with CDA to examine the use of metaphors in economic discourse during and immediately after the global mortgage crisis. The study explores power, ideology and countries' images through an analysis of conceptual metaphors using corpus-assisted tools. As advocated by Hart (2016, 2019), Fuoli and Hart (2018) and Zhang and Zhang (2020, p. 636), this research emphasizes the importance of 'triangulation', in 'critical cognitive linguistics' – a multidisciplinary approach that combines 'various methods. Building upon previous works such as Charteris-Black (2004), Arrese and Vara-Miguel (2016) and Bickes *et al.* (2014), among others, my research further advances methodological synergy by integrating triangulation across CDA, cognitive theories, and corpus linguistics.

This research incorporates innovative methodologies in terms of analytical perspective, research methods, and text selection. From an analytical perspective, the evaluation of ideologies and power distance in discourse is measured through the analysis of three elements: Type, Tell, and Tone of metaphors. These elements were not invented but rather borrowed from relevant research and integrated into the measurements. In terms of research methods, I have integrated Wang's (2017) comprehensive linear process model and supplemented it with the 6 Cs model of cyclical processes for metaphor identification (see Section 3.4.1). Additionally, I have employed Lakoff's List (1991) in conjunction with metaphor lists derived from pertinent studies to compare conceptual metaphors and make modifications that complement Lakoff's List (1991), specifically within the subfield of metaphors in economic discourse, particularly during times of economic and financial crises. Furthermore, I have constructed small economic metaphor corpora, incorporating specific metaphor formulae and index words within each metaphor tag to facilitate searching with the corpus tool AntConc, as metaphors cannot be automatically recognized by this tool alone. Following cognitive theory of categorization, a three-level hierarchy for metaphors has been adopted - metaphor categories, metaphor types, and specific metaphor words or expressions. Moreover, qualitative analysis presents typical examples of metaphor expressions within complete sentences rather than isolated fragments to ensure proper contextual understanding. In terms of economic discourse selection, this study focuses on China and America during a critical period - the global financial crisis when China's GDP became second only to that of America. This moment was pivotal, and the two countries are representative due to their robust economic status and distinct cultural, social and ideological backgrounds. The aim is to explore how these two economies are

portrayed through metaphoric language usage while also examining how their respective national images are conceptualized.

A limitation of the thesis lies in its exclusive focus on language data from a specific period during the subprime crisis, which may restrict the generalizability of conclusions to only reflect attitudes prevalent during that time frame regarding to Chinese and American economies. Future research could explore whether there are any variations in metaphorical representations of these two countries within the same media during other global financial crises, such as the Covid-19 pandemic which occurred just a decade after the mortgage crisis and had a profound impact worldwide. Wodak and Meyer (2001, p. 51) emphasized the significance of studying “changes of discursive practices over time” and suggested that analyzing longer timeframes is both interesting and necessary for uncovering their dynamics, transformations, disruptions, stagnation, and resurgence. Over time, economic developments may give rise to new information and expressions.

Furthermore, a broader range of countries and corpora could be built by incorporating more news media sources in the field of CDA. The data utilized in this research is exclusively sourced from *The Economist*, with a predominant focus on China and America. However, numerous reports pertaining to other countries within *The Economist* remain unexplored. In addition to *The Economist*, other renowned English-language economic newspapers, such as *The Financial Times*, could be considered for inclusion. Moreover, beyond English economic news discourse, diverse economic news media in various languages offer potential avenues for further critical analysis and comparative studies on similar economic issues.

The metaphors in this research were examined through the integration of manual labor and corpus-assisted tool. However, the limited examples provided do not encompass the full range of diverse language phenomena. The instances presented in this study are selectively illustrated. Given the rapid advancements in AI and modern technology, there may be more precise and effective approaches to identify and evaluate metaphors within a broader scope of data. Additionally, it is important to acknowledge that ‘variations’ are likely to occur both ‘between individuals’ and for an individual over time regarding their ‘awareness’ of the ‘subliminal meanings’ conveyed by metaphors (Charteris-Black, 2004, p. 249, 250). Hence, I relied on metaphor lists from other researchers as points of comparison rather than solely relying on my own intuition and awareness when recognizing metaphors. However, the utilization of Lakoff’s List (1991) in my study is somewhat outdated for recent data, while other lists lack the same level of systematization as Lakoff’s List (1991). Future metaphor research may explore new systematic metaphor

lists available for reference and comparison purposes, even across languages other than English if applicable or relevant.

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Appendix A Webpages of the Selected News Articles

1. <https://www.economist.com/special-report/2010/04/03/work-to-be-done>
2. <https://www.economist.com/free-exchange/2010/05/25/the-busts-second-act>
3. <https://www.economist.com/finance-and-economics/2010/05/27/home-truths>
4. <https://www.economist.com/finance-and-economics/2010/06/10/socialist-workers>
5. <https://www.economist.com/special-report/2010/06/26/paradise-foreclosed>
6. <https://www.economist.com/leaders/2010/07/22/unnecessary-evils>
7. <https://www.economist.com/leaders/2010/08/12/joy-pain-and-double-dips>
8. <https://www.economist.com/democracy-in-america/2010/08/27/how-exactly-did-inequality-fuel-the-crisis>
9. <https://www.economist.com/business/2010/10/21/bling-is-back>
10. <https://www.economist.com/news/2010/11/22/breakdown-ahead>
11. <https://www.economist.com/finance-and-economics/2010/11/25/the-mortgage-parallel>
12. <https://www.economist.com/finance-and-economics/2010/12/09/invest-then-protest>
13. <https://www.economist.com/finance-and-economics/2011/01/13/what-will-2011-bring>
14. <https://www.economist.com/leaders/2011/01/13/danger-ahead>
15. <https://www.economist.com/finance-and-economics/2011/02/18/central-bankers-on-the-catwalk-in-Paris>
16. <https://www.economist.com/finance-and-economics/2011/02/24/congregate-implicate-obfuscate>
17. <https://www.economist.com/business/2011/02/24/the-danish-armada>
18. <https://www.economist.com/leaders/2011/02/24/crisis-prevention>
19. <https://www.economist.com/newsbook/2011/02/22/alibaba-and-the-2236-thieves>
20. <https://www.economist.com/finance-and-economics/2011/03/10/alienated>

Appendix B Lakoff *et al.* (1991) Master Metaphor List (Shortened)

(Based on qualitative analysis on Chinese and American economies in Sections 4.2.3 and 5.2.3)

PROPERTIES ARE PHYSICAL PROPERTIES (p. 13)

Special case 1: IMPORTANCE IS A PHYSICAL PROPERTY

1. Importance is Centrality

Let's strip away all the unimportant details.

What is central here?

That's just a peripheral issue.

2. Importance is Interiority

This is the core of the matter

3. Importance is Size

That's a big discovery.

He concentrates on little details.

Let's look at the larger issues.

That's a monumental discovery.

Mr. Big

The big cheese

He'll never amount to anything.

4. Importance is Depth

There's a deeper issue here.

That's a profound problem.

Let's ignore all the details on the surface.

Special case 3: AMOUNT IS A PHYSICAL PROPERTY

1. Amount is Length

He's short of money.

He's long on good looks.

He's short on intelligence.

2. Amount is Verticality

The number of people living in poverty went up.

Can you please decrease the number of assignments?

3. Amount is Weight

He's a heavy smoker.

She was always a light drinker.

The bulk of the US population will soon be over 40.

4. Amount is Size

Which of the two classes is bigger?

He only has a little money.

I'm not a big eater.

Note: 'Big eater' may involve a metonymy.

Special case 4: VALUE IS SIZE

Do you have anything smaller than a twenty?

Can you break a twenty?

I only have small change.

We don't accept any bill larger than a twenty.

Note: For other examples of Properties as Physical Properties

see the following files:

Morality Ability Emotion Anger

Note: See also the Comparison file.

SHAPES ARE CONTAINERS (p. 167)

The sketch was in the shape of a heart

It was a block of chocolate in the form of a cable car.

Note: But notice you cannot say: The sketch was in a heart.
or the form of the cable car has a block of chocolate inside. etc.

Source Domain: containers

Target Domain: form, shape

(BOUNDED) TIME IS A CONTAINER (p. 78)

He did it in three minutes.

In 1968. . .

We're well into the century.

He's like something out of the last century.

ACTION IS SELF-PROPELLED MOTION (p. 27)

Alternate names: SELF-INITIATED CHANGE OF STATE IS SELF-PROPELLED CHANGE OF LOCATION

Note: This metaphor is a special case of CHANGE IS MOTION.

Source Domain: motion, moving, path

Target Domain: action, acting

1. Action is Self-Propelled Motion He exercised to the point of exhaustion.

She squeezed her way to thinner thighs.

He drank himself out of the promotion.

He went on with what he was doing.

She went back to sleep.

She successfully navigated her way through the contract negotiations.

Note: Notice, that in the 'exhaustion' example, for instance, the motion is self-propelled, but the state at which the person arrives is presumably not their goal.

Thus, it seems clear that while 'purposes are destinations' can interact with this mapping, as we will see explicitly later in this file, it does not have to be present.

What IS present in this mapping at this point, however, is that final states are final locations.

2. Manner of Action is Manner of Motion

We slogged through the application process.

He is out of step with the other students.

Slowly and steadily, she worked herself into the grave.

Never looking back, he went on with the project.

Special sub-case 1: Careful Action is Careful Motion

When I'm around her I feel like I am walking on eggshells.

He is treading on thin ice.

He is walking a fine line between asserting his independence and insulting the boss.

Special sub-case 2: Speed of Action is Speed of Motion

He quickly took himself from rags to riches.

She slowly ate her way to obesity.

3. A Stage in an Action is a Location Along a Path

We made it past the point where my legs usually get tired.

I am at that part of the application process that I really hate.

We are coming to that step where you beat the butter until smooth.

We are in between stages--next we detach the booster rockets.

She has sung her way through the anthem to the point where the really high note is.

4. Final States are Final Locations I ended up exhausted.

He's headed for an early death.

His reckless investments are taking him into bankruptcy.

Special case 1: Purposeful Action is Directed Motion to a Destination

Note: In this special case of purposeful action, we are mapping purposes as destinations.

1. Progress is Forward Movement

Let's forge ahead--we're already half-way through the analysis.

Let's keep moving forward on this experiment.

He hadn't made much headway in writing the term paper.

I'm afraid I haven't gotten very far in grading the exams.

2. Progress is Measured in Distance to Destination or in Distance From Starting Point

She finally reached the end of the dissertation-writing process.

After working on the application for days, I finally saw the light at the end of the tunnel.

We only have a short ways to go on solving this puzzle.

I'm almost through reading this book.

I've been working on this experiment for years, and the end is still a long ways off.

We've come a long way in our efforts to realize fusion.

We've made it this far in our efforts to solve the problem.

3. Speed of Progress is Speed of Motion to a Destination

He flew through his work.

He went through some of the tasks on the exam too quickly.

She is moving ahead by leaps and bounds on that project.

I am moving at a snail's pace on grading these exams.

He's moving quickly to close the deal.

4. Negative Progress is Backward Movement

I'd hate to see us back where we were thirty years ago, before civil rights had made the strides forward that we have seen.

When the computer ate her work, she found herself back at the beginning of the writing process again.

We need to backtrack on this problem--we took a wrong turn.

I keep grading papers, but I still keep falling behind.

I keep exercising, but I keep getting farther and farther from my target weight.

6. Lack of Progress Toward the Destination is Lack of Motion

I got stuck half-way through grading the exams.

He is at a standstill in the dissertation-writing process.

We aren't getting anyplace by arguing.

Making excuses is getting me nowhere.

8. A Different Means of Achieving the Purpose is a Different Path

To be cool, you have to wear your overalls this way.

She solved the problem a different way.

Do it anyway you can.

However you want to go about repairing it is fine with me.

9. Efficient Purposeful Action is Direct Motion to a Destination

He has gotten sidetracked on that problem.

She made a beeline for the presidency.

10. Starting a Purposeful Action is Starting Out for a Destination

Apply for admission--a journey of a thousand miles . . .

We are at the first step in the educational process.

We are in the first stages of filing for bankruptcy.

11. The End of Action is the End of the Path

We are reaching the end of the house-buying process.

Finally, all my educational goals are in reach.

We are entering the last stages of filing for bankruptcy.

Note: Something which we affect, something whose change we have control over, is of course understood as an object whose motion we control (She brought the water to a boil). If we have a purpose in the change that we bring about, then we can speak of that caused change toward that goal as if it were the changing object moving itself toward that goal.

From here on the discussed mapping will involve causation. The relevant generalization is that caused change in self-initiated change of state is forced motion relative to locations.

12. Control over Action is Control over Motion.

He pushed me into doing it.

She leaned on him to do it.

She pushed me through the steps in the application process.

Indeed someone to help me through this problem.

She leads him around by the nose.

She held him back in his endeavors.

She is being pushed into a corner by the ultimatum.

Her boss doesn't give her any slack.

She has her secretary on a tight rein.

She has her fiancé on a short leash.

He is tied to his mother's apron strings.

Note: Some of these examples involve forced motion relative to the action-region/path, others involve forced motion within the action-path.

14. Obstacles to Action are Obstacles to Motion

We hit a roadblock when we tried to repeat the experiment.

We are at an impasse in this project.

I've hit a brick wall in my analysis.

We are going upstream--the administration is opposed to our actions.

We are fighting an uphill battle--we'll never get this proposal approved.

It's a steep road ahead for equal rights advocates.

We have to get over/around this problem.

We faced many hurdles in taking on this problem.

When the going gets tough, the tough get going.

17. Caused Inability to Act is Prevention of Motion

Regulations keep me from moving ahead with this housing project.

Sudden illness stopped his progress.

Special case 1: Knowing What will Happen Is Seeing Where You are Going

Looking down the road, I don't see any problems.

I can't see any way to do that.

I can't see my way clear to giving you a raise.

Looking back, I can see that we could have done it better.

I can't see where I'm headed on this problem.

I can see the light at the end of the tunnel.

Note: This is an intersection of ACTION IS MOTION with KNOWING IS SEEING, not a strict entailment of ACTION IS MOTION.

Special case 2: DESIRES THAT CONTROL ACTION ARE EXTERNAL FORCES THAT CONTROL MOTION

That coat pulled me into the store.

The smell of the cookies dragged me against my will to the cookie jar.

Note: This is an interaction of part of the ACTION IS MOTION mapping with a notion of a desire as an external force.

Special case 3: OBLIGATIONS/AGREEMENTS ARE CONTAINERS

Alternate names: (Future Commitments are Containers?)

What obligations have you gotten yourself into?

Can you get out of doing the dishes?

I can't get out of it, I'm locked into it.

Try to get out of those commitments; don't let your boss box you in.

There's no way out; I have to do it.

He trapped her into going with her.

Do you know what you're getting into?

Have they entered into an agreement yet?

He couldn't get out of his agreement.

He can be coaxed into an agreement.

Is there an escape hatch in this agreement?

TIME IS A LANDSCAPE WE MOVE THROUGH (p. 77)

We're coming up on Xmas.

Thanksgiving is looming on the horizon.

He didn't make it to Tuesday.

A short/long period of time.

I can't do it any longer.

Within the week.

Outside of a week.

Entailments: Time can be quantified in lengths.

Note: An alternative name for this metaphor is TIME IS A LANDSCAPE IN WHICH EVENTS ARE LOCATIONS

Related metaphors: Related to Existing is Moving Time is Something Moving Toward Us Time is a Pursuer

Source Domain: landscape

Target Domain: time

Note: This is the 'location branch' of time. In this metaphor the person experiencing time is a trajector, and the time itself is a landmark.

THEORIES ARE PEOPLE (w.r.t. opinions) (p. 113)

The theories agree/disagree with each other on that issue.

This theory doesn't say anything about that point.

This theory doesn't take a stand on that.

The theory predicts. . .

The theory makes certain assumptions.

The theory aligned itself with/diverged from/ran up against other theories.

Source Domain: people, opinions

Target Domain: theories

Note: Looks like the THEORIES IN WAR one above: note 'take a stand'

MACHINES ARE PEOPLE (p.181)

Source Domain: person

Target Domain: machine

1. Degree of Functioning is Health

-The blender just died

-His engine came to life

- This battery has a life of 3 years
- Her typewriter is sick
- The typewriter went crazy

PEOPLE ARE MACHINES (p. 191)

He had a breakdown.
 Her ticker is weak.
 I wonder what makes him tick.
 Fuel up with a good breakfast.
 I feel all run down.
 He's wound up tight as a spring.

Source Domain: machines

Target Domain: people, bodies, body

Note: Some of this is specific to bodies--Need separate BODIES ARE MACHINES.

STATES ARE LOCATIONS (p. 8)

Source Domain: locations

Target Domain: states

He is in love.
 What kind of a state was he in when you saw him?
 She can stay/remain silent for days.
 He is at rest/at play.
 He remained standing.
 He is at a certain stage in his studies.
 What state is the project in?

Special case 2: Existence is a Location (Here)

Note: See File on this domain: Existence

EXISTENCE IS A LOCATION (HERE) (p. 70)

Alternate names: EXISTING IS BEING PRESENT HERE

Note: This is a special case of STATES ARE LOCATIONS

States are Locations can be seen in the file: States

Something good came about.
 It came into existence
 It went out of existence
 The baby is due any day.
 The baby is a new arrival.

No answers were forth-coming.

Special case 1: EXISTENCE IS LOCATION UP HERE

I can't make it; something came up.

The question simply doesn't arise here.

I don't want to arouse/raise suspicion.

1. Maintaining Existence is Maintaining Location Up Here

Renewed interest has kept Zen Buddhism from sinking into non-existence.

The anti-war movement needs your support.

Their marriage is on shaky ground.

Special case 2: EXISTENCE IS LOCATION OUT OF CONTAINER

The emergence of new sciences is to be welcomed, not feared.

LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY (p. 36)

Note: This metaphor is part of the EVENT STRUCTURE system. I have tried to limit the examples in this file to ones that clearly involve the specific target domain: journey, not the more general one:

motion. Examples of Purposeful Action as Motion can be found in the file: Action

For a lot of the examples in this file, the target domain involves the effects that events have on you as you engage in purposeful activities. Thus this is clearly a special case of causation.

Engaging in a long term action involves change of state, a purpose, and external events affecting you. The changing that one undergoes as one engages in the activity is understood as motion from one location to another. The changing that one undergoes as external events affect one, is understood as control over one's location exercised by an outside force. Thus, external events are seen as things (or a fluid) in motion, with direction and speed and with a force that can affect one's journey.

We will see below that this metaphor is conventionalized with regard to three special cases of long term purposeful activities: Life, Career, and Love relationships. (LIFE IS A JOURNEY, ACAREER IS A JOURNEY, and LOVE IS A JOURNEY)

Special case 1: Life is a Journey

3. Long term Purposes are Journey Destinations

He's headed for great things.

My goal lies at the end of my life's journey.

4. The Means For Achieving Purposes are Routes

If this doesn't work, I'll just try a different route.

It's an arduous path, but he'll make it.

She'll cross that bridge when she comes to it.

5. Difficulties are Impediments to Travel

He's lost his way.

He has a rocky road ahead of him.

7. Progress is the Distance Travelled

We've come a long way.

8. Things You Gauge

Your Progress by are Landmarks

Getting her PhD was a big landmark in her life.

Special case 3: Career is a Journey

He's hit a crossroads in his career.

BELIEFS ARE BEINGS WITH A LIFE CYCLE (p. 107)

The belief lives on.

That belief died out years ago.

That belief was born of the early philosophers.

Source Domain: beings, life cycle

Target Domain: beliefs

Note: This is a special case of EXISTENCE IS LIFE.

Special case 1: BELIEFS ARE PLANTS

1. Development of a Belief is Growth of a Plant

This is just the seed of a belief.

This belief stems from my basic morality.

This belief is an offshoot of my faith.

This belief has been growing in me for years.

This belief has taken root in my mind.

This is a flourishing belief in this culture.'

I planted the belief in his mind.

2. Basis of a Belief is Rooting of a Plant

Related metaphors: MAINTAINING EXISTENCE IS SUPPORTING

This is a deeply rooted belief.

This belief is rooted in fact.

LIGHT IS A FLUID (p. 179)

Sunlight poured into the room.

The stage was flooded with light. (Floodlights)

He soaked up some sun.

Pools of light were scattered across the clearing.

The clearing was splashed with light. He went sunbathing.

Light was seeping in around the door of the darkroom.

Source Domain: fluid, liquid, water

Target Domain: light, lightness, sunlight

Note: Is this a special case of a LIGHT IS A SUBSTANCE metaphor?

MONEY IS A LIQUID (p. 183)

1. Cash is a Liquid

liquid assets

currency(see OED)

liquidating assets

My money is all dried up

He's just sponging off of you (absorbing cash)

He's solvent/insolvent

2. Gain/Loss of Money is Movement of a Liquid

cash flow

influx and out flux of money

Don't pour your money down the drain

3. Money which cannot be accessed is Frozen

frozen assets

price freeze

4. Control in a Financial Situation is Control in Liquid

keep your head above water, financially

get in over your head

stay afloat

the business went under/sunk

drowning in debts

INVESTMENTS ARE CONTAINERS FOR MONEY (p. 184)

Put your money in bonds

The bottom of the economy dropped out

I'm down to my bottom dollar

This is an sirtight investment.

Note: MORE IS UP is involved here somewhere

1. Joining another on an investment is mixing liquids

We pooled our funds for the venture

Note: The two metaphors above form a coherent system,

INVESTMENTS ARE CONTAINERS FOR LIQUIDS, which gives "pour money into bonds", "tap into a source of funds", and "all tapped out".
Bibliography: Lynn Stanton (185, '89)

HARM IS PHYSICAL INJURY (p. 45)

Source Domain: injury

Target Domain: harm

1. Experiencing harm is being in pain
2. Well-being is health/fitness
3. Restitution is healing

Grounding: Physical Injury is harmful to people

Note: Special Cases of Harm:

Special case 1: Psychological harm is physical injury

It was a traumatic experience.

Her death hurt him.

The accusation wounded her.

He's mentally ill/ fit.

My pride was wounded.

She recovered from the wound to her psyche, but scars remained.

Special case 2: Economic harm is physical injury

The stock market suffered a sharp dive today.

Americans can expect painful cutbacks with the recession.

My stock portfolio is very healthy.

The market returned to health today.

The symptoms of the recession have all but disappeared.

Special case 3: Environmental harm is physical injury

The oil spill has caused a shock to the environment.

Smog pollution is an environmental malaise.

Ecologists are nursing the Bay back to health.

Special case 4: Political harm is physical injury

The difficult election left the candidate scarred.

Her admission killed her in the election.

Gorbachev is a lame duck.

Note: Special Cases of Injury:

Special case 2: Harm is Physical Injury due to Sickness

Knowledge structures: Sickness is not easily attributed to a single cause

Entailments: The harm is not easily attributed to a single cause

Knowledge structures: Sickness is not intentionally caused

Entailments: The harm is not intentionally caused

Knowledge structures: Sickness is not temporally discrete

Entailments: The harm may linger

Knowledge structures: Sickness need not be painful or heal

Entailments: The harm may not be experienced as harmful, and may not go away in time

Knowledge structures: Sickness does not leave scars

Entailments: The harm will not have permanent aftereffects

COMPETITION IS WAR (p. 66)

The debate team brought out their big guns.

The other team sent in the cavalry against us.

We took over the ball deep in their territory.

They battled each other over the chess board every week.

Source Domain: war

Target Domain: competition

Note: Can be seen as GENERIC IS SPECIFIC metaphor.

TREATING ILLNESS IS FIGHTING A WAR (p. 176)

Source Domain: war

Target Domain: illness, treatment, medicine

1. The Disease is an Enemy

3. Infection is an Attack by the Disease

His body was under siege by AIDS.

He was attacked by an unknown virus.

The virus began an attack on the organ systems.

6. The Immune System is a Defense The body normally has its own defenses.

Knowledge structures: War legitimates all strategies and any means

Bibliography: Tony Moy, Susan Sontag for examples

THEORETICAL DEBATE IS COMPETITION (p.117)

Source Domain: competition

Target Domain: theory, theories, believers

One theory emerged victorious over the other.

The adherents of that theory will soon be beaten out by new theorists.

The newer theory won out in the end.

This theory is unmatched/ unequaled.

Those are rival/competing theories.

Special case 2: Theoretical Debate is a Battle

A fierce battle is shaping up in modern philosophy.

Those two theories have been fighting it out for years.

Special case 4: Theories are Defensible Positions

Alternate names: ARGUMENT IS WAR

Related metaphors: BELIEFS ARE STRUCTURES

What is his position on the issue?

He took a stand on abortion

Special sub-case 1: Theories are Fortifications

Her belief was shaky; it didn't stand up to attack

That's a firmly entrenched belief

1. Data is Territory

Special sub-case 2: Data Explained by a Theory is Covered by the Theory

What phenomena does your theory cover?

3. Attacking a Theory is Attacking a Fortification

He tried to sway her belief.

Her beliefs came under attack.

He attacked my position on abortion

4. Basic Assumptions of a Theory are Foundations

4a. Arguing against Assumptions of Theories is Attacking Foundations

He chipped away at the foundation for her beliefs.

He tried to undermine her belief.

5. Believers of the Theory Protect the Theory from Collapse

5b. Believers are Defenders They are defenders of the Whorfian position.

I defended my belief in capital punishment

6. Abandoning a Belief is Retreating from a Position

I retreated from my stand on taxation under his cynical attacks

Knowledge structures: This metaphor system is based on a schema of feudal war:

(1) Rulers control territory by building fortifications

(2) The more territory a fortification commands, the more powerful it is

- (3) In war, the goal is to capture as much territory as possible
- (4) Fortifications are defensible because they have both strong construction and many soldiers
- Entailments: In the target domain,
- (1) People explain data by constructing theories
- (2) The more data a theory explains, the stronger it is
- (3) When theories compete, they each seek to explain as much territory as possible
- (4) Theories are defensible when they have both strong foundations and many supporters/defenders

Bibliography: MWLB, GL, JE, Alan Schwartz, Colleen Cotter

THE MIND IS A BODY (p. 80)

Note: For specific cases, see:

Mind is a Body (Object)

Mind is a Body (Location)

Mind is a Body (Food)

Mind is a Body (Other)

Mind is a Body (Perception)

Mind is a Body (Adversary)

Bibliography: Eve Sweetser (date), Mark Johnson (date)

1. MENTAL FITNESS IS PHYSICAL FITNESS

His mind is strong and supple.

His mind is decaying.

The famous professor could perform astonishing mental feats.

The textbook contained many exercises for the students to practice on in order to get them in shape for the final.

They practice drills all day long.

You have to go through long years of academic training in order to become strong in your field.

In the summer, the mind tends to go flabby.

Bibliography: AG & Nicole Maguire (185, '87)

2. MENTAL CONTROL IS PHYSICAL CONTROL

Special sub-case 1: Mental Control is Hand Control

2a. Being in Control of S.T. is Having it in Hand

I can handle the situation

It's in the palm of my hand

He's like putty in my hands

She's got command of the situation (from root man=hand)

2f. The features of the hand affect control

He's too heavy-handed I'm all thumbs

Treat this with kid gloves

He's got the upper hand (with CONTROL IS UP)

Bibliography: Mark Eginton (185, '89), Tanya Zimmerli (185, '89), Alan Schwartz

Source Domain: physical control

Target Domain: control

SOCIETY IS A BODY (p. 211)

the health of society

social ills

social death; the death of society

social recovery

the nation is in a depression

our society is making great strides

the head of society/ head of state

the body politic

the sick society

social afflictions

nurse our nation back to health

social madness/insanity

give society a shot in the arm

China finally stood up and was noticed

social paralysis

cancer on society

backbone of society

bowels of society

spies are the eyes and ears of a society

the Voice of America (radio station)

Note: mapping:

body society

heart central element of society (essential to function)

head intelligentsia/ruling group

disease social malaise/problem

health absence of social problem

birth inception

death collapse

medicine cure for social problem

cancer social disruption from inside that spreads slowly and invisibly

infection spread of dangerous ideas or beliefs

Parts of society itself are the doctors or caretakers of society
what does it mean to be healthy, normally functioning?
entails that some groups within society may be viewed as sources of disease.
Bibliography: Tony Moy, Susan Sontag

IDEAS ARE PERCEPTIONS (p. 86)

1. The Mind is/has an Eye
2. Thinking is Examining

Alternate names: Mental Investigation is Visual Inspection

Let's take a closer look at that proposal.

He puts my ideas under a microscope.

He held it up to scrutiny.

She examined it closely.

He wanted to see all sides of the issue.

3. Understanding is Seeing

3a. Aids to Gaining Awareness are Aids to Vision.

Can you shed more light on this issue?

I don't quite see what you are talking about.

He spotlighted the issues that were important.

She finally opened her eyes to what was going on around her.

3b. Not being Aware of Reality is not Seeing Reality.

He still has the illusions of his youth.

He sees only what he wants to see.

He's not seeing things clearly.

The situation was going on under his nose, but he didn't realize it.

3c. Impediments to Awareness are Impediments to Seeing.

I was in the dark for a long time.

My early training had put blinders on me.

I'm just in a fog today, I don't know what is going on.

She walks around blindfolded.

His eyes are closed to everything around him.

3d. Awareness Despite Hindrance is Seeing Despite Visual Hindrance

He saw through her lies.

He could see what was behind my actions.

He has eyes in the back on his head.

Bibliography: AG & JE

4. Communication is Showing

Alternate names: Directing Someone's Attention is Directing Their Vision

See, you just have to look at it this way.

Look out for tricky spots.

Just look at what I'm trying to show you.

4a. Deception is the Purposeful Prevention of Sight:

4b. Through the use of covers:

The Watergate cover-up.

He put up a good front.

He put on an act to hide his true motives.

Every spy needs a good cover.

4c. Through some impairment of vision:

They purposefully left me in the dark regarding that point.

He's deliberately clouding the issue.

They threw up a smoke screen of lies.

They obscured the issue.

She blinded me with claims of innocence.

6. Creativity is Seeing in a Different Light

Appendix C Corpus I Textfile 1

(Given that the primary purpose of this thesis is to analyze metaphors further selected to describe target domain concepts shown in Table 5 and Table 6 in Section 3.4.6, rather than all the metaphors describing the Chinese or U.S. economies, this Appendix lists only Textfile 1 but not all 20 textfiles, as a representative sample to illustrate the methods, process and criteria I used to label metaphors.)

Work to be done [ACTION IS CONTROL OVER POSSESSIONS metaphorA possessions]

How the government can help [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Control over Action is Control over Motion metaphorA self-propelled motion] things along [A PROBLEM IS A REGION IN A LANDSCAPE Approaches to a Solution are Paths in Landscape metaphorA region in a landscape]

UNTIL the financial crisis hit [EFFECTS OF FINANCIAL CRISIS ARE INJURIES metaphorA physical injuries], America's mounting [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] imbalances [ECONOMIC STABILITY IS BALANCE metaphorA balance] drew scant attention [IDEAS ARE PERCEPTIONS Communication is Showing / Directing Someone's Attention is Directing Their Vision metaphorA perceptions] from presidents. ...imbalances [ECONOMIC STABILITY IS BALANCE metaphorA balance] have been a recurrent [EXISTENCE IS VISIBILITY metaphorA visibility] theme of Barack Obama's. His speeches often sermonized [ECONOMIC ACTIVITY IS RELIGION metaphorA religion] about the evils [FINANCIAL CRISIS IS EVIL metaphorA evil] of bubbles [FINANCIAL CRISIS IS BUBBLE metaphorA bubble], easy [OPPORTUNITIES ARE OBJECTS Serendipitous Opportunity is An Object Easily Accessible Without Effort on the Part of the Experiencer metaphorA objects] credit and borrowing [COUNTRIES ARE PEOPLE metaphorA people] from China [COUNTRIES ARE PEOPLE metaphorC people].

Although Mr. Obama diagnosed [ECONOMIC PROBLEM IS A DISEASE metaphorA disease] the problem correctly, he has yet to come up with [A PROBLEM IS A REGION IN A LANDSCAPE Trying to Solve a Problem is Looking for Solution in the Landscape metaphorA region in a landscape] a solution. Indeed, circumstances have forced [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphorA self-propelled motion] him to pursue [PRESIDENT IS A PURSUER metaphorA pursuer] policies that actually slow [THE PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION Control Over the Progress of External Events is Control over Their Forward Motion metaphorA forward motion] the rebalancing [ECONOMIC STABILITY IS BALANCE metaphorA balance]. A wider [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] federal deficit offsets private retrenchment but prolongs [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphorA physical properties] America's [COUNTRIES ARE PEOPLE metaphorA people] dependence on foreign savings. Tax credits and mortgage guarantees keep the housing market *alive* [MARKETS ARE BEINGS WITH LIFE CYCLES metaphorA being with life

cycles & FAILURE IS DEATH / SUCCESS IS LIFE metaphorA life] yet compound distortions [STATES ARE SHAPES metaphorA shapes] that contributed [CAUSATION IS CONTRIBUTION metaphorA contribution] significantly to the debt mountain [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] in the first place [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE metaphorA scale].

Mr. Obama's supporters on the left want him to attack [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphorA war] imbalances [ECONOMIC STABILITY IS BALANCE metaphorA balance] by supporting [MAINTAINING EXISTENCE IS SUPPORTING metaphorA supporting] domestic manufacturers (an activity delicately termed “industrial policy”) and punishing [ACTION ON IS TRANSFERRING AN OBJECT metaphorA transferring an object] other countries [COUNTRIES ARE PEOPLE metaphorA people], particularly China [COUNTRIES ARE PEOPLE metaphorC people], that they say trade unfairly. Mr. Obama initially [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE metaphorA scale] shared [INSTINCTS ARE POSSESSIONS metaphorA possessions] those instincts. But in the White House he is surrounded by orthodox economists who are sceptical of industrial policy and protectionism. These differences have produced [ECONOMIC POLICIES ARE PRODUCTS metaphorA products] a schizophrenic [ECONOMIC POLICIES ARE MADNESS metaphorA madness] mix [ECONOMIC POLICIES ARE LIQUIDS metaphorA liquid] of policies. The president slapped [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphorA self-propelled motion] tariffs on cheap tyres from China, proposed making it harder [A PROBLEM IS LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphorA locked container for its solution] for multinationals to defer [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle metaphorA preventing forward motion toward a goal] taxes on profits from abroad, earmarked [PROBLEM IS A TARGET Trying to Solve Problem is Shooting at Target metaphorA target] stimulus money for green-technology investment and agreed to impose “buy American” provisions on anything bought with stimulus funds. On the other hand [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES Comparison of Importance is Weighing metaphorA comparison of physical properties] he insisted that those provisions must not run foul of [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events Detrimental to Action are Opposing Forces metaphorA forces affecting forward motion] World Trade Organisation rules and refrained from telling bailed-out banks and carmakers how to run [BUSINESSES ARE MACHINES metaphorA machines] their businesses.

These tensions [PSYCHOLOGICAL FORCES ARE PHYSICAL PROCESSES metaphorA physical forces] are coming to [IDEAS ARE OBJECTS metaphorA objects] a head [SOCIETY IS A BODY metaphorA body]. Mr. Obama may formally declare China a currency manipulator [COUNTRIES ARE PEOPLE metaphorC people] soon. Some in Congress want to make [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphorA self-propelled motion] it easier to impose duties on Chinese imports to

compensate [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation metaphorA lacking a needed possession]. Protectionism and industrial policy are tempting [ECONOMIC POLICIES ARE LOVE OBJECTS metaphorA love objects] and might, at the margin [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers], hasten [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion - Speed of Action is Speed of Motion metaphorA self-propelled motion] rebalancing [ECONOMIC STABILITY IS BALANCE metaphorA balance]. But they would inflame relations with trading partners, provoke retaliation [ECONOMIC ACTIVITY IS WAR metaphorA war] and ultimately slow [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion - Speed of Action is Speed of Motion metaphorA self-propelled motion] the restructuring [ECONOMY IS BUILDING metaphorA buildings] of the economy towards [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events Detrimental to Action are Opposing Forces metaphorA forces affecting forward motion] more productive, export-oriented businesses. Import protection [ECONOMIC ACTIVITY IS WAR metaphorA war] generally shelters [ECONOMIC ACTIVITY IS WAR metaphorA war] the least productive industries and therefore the ones least likely to export.

Reach for the watering can [MONEY IS A LIQUID metaphorA liquid]

... The Export-Import Bank has authorised record volumes [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] of trade credit, but Fred Hochberg, its president, says America [COUNTRIES ARE PEOPLE metaphorA people] still spends [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] less on such efforts [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] than China or Canada [COUNTRIES ARE PEOPLE metaphorC people] do, even though its economy is much larger [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties].

... Mr. Obama's free-trade agenda, however, has focused on [IDEAS ARE PERCEPTIONS metaphorA perceptions] the enforcement of existing trade laws. Though he has recently shown [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphorA perceptions] renewed [CHANGE IS RENEWAL metaphorA renewal] interest in free-trade agreements with Panama, Colombia and South Korea, only the first seems likely to be ready for a Senate vote this year.

... Many failed [ECONOMIC ACTIVITY IS COMPETITION metaphorA competition], but the handful [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] that succeeded [ECONOMIC ACTIVITY IS COMPETITION metaphorA competition], such as advanced refrigerator and freezer compressors, generated outsize [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] returns [HARM IS HAVING A HARMFUL POSSESSION Restoration is getting a good thing in compensation metaphorA having a harmful possession].

Supply-side incentives go [ACTION IS SELF-PROPELLED MOTION Progress is Forward Movement metaphorA self-propelled motion] only so far [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance From Starting Point metaphorA self-propelled motion]. ... one of the state's most effective roles [ECONOMIC ACTIVITY IS A DRAMA metaphorA drama] was "stimulating or providing demand". Simply put [ARGUMENT IS MOTION metaphorA motion], if policymakers get the price signals [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphorA perceptions] right, firms [COMPANIES ARE PEOPLE metaphorA people] and consumers will of their own accord reorient their efforts away [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphorA physical closeness] from consumption and towards [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA direction] exports and cleaner energy.

Trust [CURRENCY IS PEOPLE metaphorA people] the dollar

In exports the most important price signal [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphorA perceptions] is the dollar. In this instance they were writing about China and other emerging [EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorC location (here)] markets, but the same is broadly true of rich countries.

... A repeat [KNOWLEDGE OF PAST EVENTS IS AN EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS metaphorA external event exerting force on present events] is not on the cards [ECONOMIC ACTIVITY IS A CARD GAME metaphorA game].-Nor is the dollar as obviously overvalued [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties].

A more benign [COMPLIANCE TO ECONOMIC POLICIES ARE TIGHTNESS metaphorA tightness] route [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY The Means For Achieving Purposes are Routes metaphorA journey] to the same destination [STATES ARE LOCATIONS Purposes are Destinations metaphorA location] would be a combination of tight [COMPLIANCE TO ECONOMIC POLICIES ARE TIGHTNESS metaphorA tightness] fiscal and loose [COMPLIANCE TO ECONOMIC POLICIES ARE TIGHTNESS metaphorA tightness] monetary policy.

For America it will be tougher [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphorA container]. The private sector remains [STATES ARE LOCATIONS metaphorA location] above [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] so weak [ECONOMIC SECTOR IS A BODY metaphorA body] that an early and sustained attack [ECONOMIC ACTIVITY IS FIGHTING A WAR Attacking Economic Entities is Attacking a Fortification metaphorA fighting a war] on the budget deficit could push the economy back into [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION – CAUSED CHANGE OF STATE IS CONTROL OVER AN ENTITY RELATIVE ETO A LOCATION metaphorA control over an entity relative to a location] recession [HARM IS PHYSICAL

INJURY Economic harm is physical injury metaphorA physical injury]. The Federal Reserve at present has little [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] scope to compensate [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation metaphorA lacking a needed possession] because interest rates are already at zero.

In energy the necessary price signal [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphorA perceptions] is also obvious: raise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] the price of carbon. That is Mr. Obama's stated aim [PROBLEM IS A TARGET Trying to Solve Problem is Shooting at Target metaphorA target], but the prospects for a comprehensive cap-and-trade bill look [A PROBLEM IS A REGION IN A LANDSCAPE Trying to Solve a Problem is Looking for Solution in the Landscape metaphorA region in a landscape] poor [WELL-BEING IS WEALTH metaphorA wealth]. An alternative would be to raise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] the tax on petrol. Yet it will not happen, because a higher [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] petrol tax is politically even more unacceptable to Mr. Obama and Congress than cap-and-trade.

The process [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Starting a Purposeful Action is Starting Out for a Destination metaphorA self-propelled motion] of rebalancing [ECONOMIC STABILITY IS BALANCE metaphorA balance] America's economy has begun [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Starting a Purposeful Action is Starting Out for a Destination metaphorA self-propelled motion]. Consumers are spending less, borrowing less and driving less. The trade deficit has narrowed [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] and exports are rebounding [ECONOMY IS A MACHINE metaphorA machines]. Encouraging though all this is, there are still plenty of ways [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION - MEANS OF CHANGE IS PATH OVER WHICH MOTION OCCURS metaphorA control over relative location] that the rebalancing [ECONOMIC STABILITY IS BALANCE metaphorA balance] could be halted [THE PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION metaphorA forward motion].

Appendix D Metaphor Corpus C

1

Mr. Obama may formally declare China a currency manipulator [COUNTRIES ARE PEOPLE metaphorc people] soon.

In this instance they were writing about China and other emerging [EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorc location (here)] markets, but the same is broadly true of rich countries.

His speeches often sermonized [ECONOMIC ACTIVITY IS RELIGION metaphorA religion] about the evils [FINANCIAL CRISIS IS EVIL metaphorA evil] of bubbles [FINANCIAL CRISIS IS BUBBLE metaphorA bubble], easy [OPPORTUNITIES ARE OBJECTS Serendipitous Opportunity is An Object Easily Accessable Without Effort on the Part of the Experienter metaphorA objects] credit and borrowing [COUNTRIES ARE PEOPLE metaphorA people] from China [COUNTRIES ARE PEOPLE metaphorc people].

Mr. Obama's supporters on the left want him to attack [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphorA war] imbalances [ECONOMIC STABILITY IS BALANCE metaphorA balance] by supporting [MAINTAINING EXISTENCE IS SUPPORTING metaphorA supporting] domestic manufacturers (an activity delicately termed “industrial policy”) and punishing [ACTION ON IS TRANSFERRING AN OBJECT metaphorA transferring an object] other countries [COUNTRIES ARE PEOPLE metaphorA people], particularly China [COUNTRIES ARE PEOPLE metaphorc people], that they say trade unfairly.

The Export-Import Bank has authorised record volumes [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] of trade credit, but Fred Hochberg, its president, says America [COUNTRIES ARE PEOPLE metaphorA people] still spends [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] less on such efforts [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] than China or Canada [COUNTRIES ARE PEOPLE metaphorc people] do, even though its economy is much larger [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties].

ON JUNE 7th strikers [PEOPLE ARE MACHINES metaphorc machines] at a rubber factory near Shanghai clashed [PEOPLE ARE MACHINES metaphorc machines] with Chinese police.

3

Tongzhou's new flats are one example of the property boom [GOOD IS UP metaphorC up] in China, ...

The boom [ECONOMIC PROSPERITY IS LOUD SOUND metaphorC sound] has resonated [ECONOMIC PROSPERITY IS LOUD SOUND metaphorC sound] widely [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorc physical properties].

But the boom [GOOD IS UP metaphorC up] has not lasted long [LONGTERM PURPOSEFUL CHANGE IS A JOURNEY metaphorc journey] enough to leave too much debt in its wake [ECONOMIES ARE PEOPLE].

China's economic boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] can survive a property bust [HOUSING MARKET IS A BRITTLE OBJECT metaphorc brittle object].

It is true that China's households are increasingly [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] turning to [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction] the banks, as well as relatives, to help them buy a home.

Across the country as a whole [COHERENT IS WHOLE metaphorC whole], home prices are nine times the average income of urban households.

But China's property market does not yet serve [MARKET IS A SERVER metaphorC server] the average household, as Tao Wang of UBS points out [IDEAS ARE PERCEPTIONS Understanding is Seeing – Aids to Gaining Awareness are Aids to Vision metaphorC perceptions].

Stephen Green of Standard Chartered reckons [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphorC accounting] that prices of new homes fell [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] by over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorC physical properties] 20% on average in the first week of May [(BOUNDED) TIME IS A CONTAINER metaphorC container] in Beijing, Shanghai and Shenzhen, although he cautions that this may reflect the mix [INVESTMENTS ARE CONTAINERS FOR MONEY Joining another on an investment is mixing liquids metaphorC containers for money] of homes on offer, as developers keep their best properties off [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS metaphorC physical closeness] the market for now.

Banks have expanded [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] their mortgage-books briskly [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion – Speed of Action is Speed of Motion metaphorC self-propelled motion]; local governments [LOCAL GOVERNMENTS ARE PEOPLE metaphorC people] are filling their coffers [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorC containers for money] by selling land to developers or to the “urban investment vehicles” they sponsor.

If mortgages did turn sour [PERCEPTION IS RECEPTION Perceiving is Eating metaphorC reception], how badly would China's banks suffer [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury]?

Dividing one by the other gives [COMMUNICATION IS TRANSFER metaphorC transfer] an alternative gauge of prices, which increased [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] by almost 18% nationally in the year to April [(BOUNDED) TIME IS A CONTAINER metaphorC container] and by over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorC physical properties] 95% in Beijing.

To buy a 100-square-metre home in the capital, the average Beijing household must now spend 17 years' [(BOUNDED) TIME IS A CONTAINER metaphorC container] income.

In China's biggest [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorC physical properties] cities, such as Beijing, Shanghai, Shenzhen and Guangzhou, prices did rise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] too far [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is a Diversion which moves you a different direction metaphorC preventing forward motion toward a goal] and too fast [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion – Speed of Action is Speed of Motion metaphorC self-propelled motion].

These vehicles take loans, issue bonds or pool [INVESTMENTS ARE CONTAINERS FOR MONEY Joining another on an investment is mixing liquids metaphorC containers for money] capital with private firms to fund infrastructure projects, including housing.

Three years earlier [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through], Cai Fang of the Chinese Academy of Social Sciences argued that China, a country of 1.3 billion people, would soon run [ACTION IS SELF-PROPELLED MOTION Speed of Progress is Speed of Motion to a Destination metaphorC self-propelled motion] short of [AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphorC physical properties] workers.

Mr. Rothman and his team surveyed over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] 350 middle-class households outside China's biggest [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorc physical properties] cities, where prices are at least 60% cheaper.

Property and construction represent about 10% of China's GDP, not counting [MENTAL ACCOUNTING Explaining the Causation is Accounting - Explaining the Causation is Counting the Factors metaphorC accounting] the consumer goods that homebuying inspires, such as the quilts and curtain rails on sale in Tongzhou's market.

But China's government has [GOVERNMENTS ARE PEOPLE metaphorc people] a lot of money to waste [MONEY IS A RESOURCE metaphorC resource].

That makes China's home prices look [EXTERNAL APPEARANCE IS A COVER metaphorC cover] more affordable [WELL-BEING IS WEALTH metaphorC wealth].

China's homebuyers also include a younger generation who missed out [COHERENT IS WHOLE metaphorC whole] on the 1998 windfall [OPPORTUNITIES ARE OBJECTS Serendipitous Opportunity is An Object Easily Accessable Without Effort on the Part of the Experiencer metaphorC objects] & [EXTERNAL CONDITIONS ARE CLIMATE metaphorC climate] (described by Andy Rothman of CLSA, a brokerage, as the “largest [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PEROPERTY Importance is Size / IMPORTANT IS LARGE SIZE metaphorc physical properties] one-time transfer of wealth in the history of the world”).

Mr. Rothman reckons [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphorC accounting] that three-quarters of China's homeowners remain [STATES ARE LOCATIONS metaphorc location] stuck [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Lack of Progress Toward the Destination is Lack of Motion metaphorc self-propelled motion] in cramped [HARM IS PHYSICAL INJURY Experiencing harm is being in pain - Economic harm is physical injury metaphorC physical injury], shoddy [HARM IS PHYSICAL INJURY Well-being is health/fitness metaphorC physical injury] flats received [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation metaphorC lacking a needed possessions] a decade ago from the government.

The worry now is that a bursting [PROPERTY IS A BRITTLE OBJECT metaphorC brittle object] property bubble [PROPERTY IS BUBBLE metaphorC bubble] might do damage [ECONOMIC ACTIVITIES ARE DAMAGE metaphorC damage] to China's lenders, ruin [ECONOMIC ACTIVITIES ARE DAMAGE metaphorC damage] local exchequers and cast a pall over [BADNESS IS DARKNESS metaphorC darkness] its economy—and the countries which sell to it.

China's local governments are no doubt wasting [MONEY IS A RESOURCE metaphorC resource] a lot of money.

But thanks to China's “one-child” policy, a newly married couple can count on [MENTAL ACCOUNTING Explaining the Causation is Accounting - Explaining the Causation is Counting the Factors metaphorC accounting] the undivided [COHERENT IS WHOLE metaphorC whole] support [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorc location (here)] of their parents to buy a new flat.

Mr. Shih's estimate (not counting [MENTAL ACCOUNTING Explaining the Causation is Accounting - Explaining the Causation is Counting the Factors metaphorC accounting] the untapped [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Economic Intimacy Is Established By Physical Contact metaphorC physical closeness] credit lines) would add another 34 percentage points to China's ratio of public debt to GDP.

Like Japan then, China today has a strong [HOPE IS A BENEFICIAL POSSESSION Strength of Hope is Strength of an object beneficial metaphorC possessions] demand [DESIRES ARE FORCES BETWEEN THE DESIRED AND THE DESIRER metaphorC forces between the desired and the desirer] for housing, fuelled [COUNTRIES ARE MACHINES metaphorC machines] by fast growth [COUNTRIES ARE PLANTS Development of Economy is Growth of a Plant metaphorC plants] and rapid urbanisation, and a tolerable exposure [ECONOMIC ACTIVITY IS A RISK metaphorC risk] & [HARM IS BEING IN A HARMFUL LOCATION metaphorC being in a harmful location] to debt.

Prices would have to fall [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorC physical properties] a long way [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorC self-propelled motion] to push [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION – CAUSED CHANGE OF STATE IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION metaphorC control over an entity relative to a location] borrowers “under water” [MONEY IS LIQUID Control in a Financial Situation is Control in Liquid metaphorC liquid], owing more than the value of their house.

In Tongzhou, prices have fallen [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorC physical properties] by 13.4% since mid-April [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through], according to the Beijing Times.

On the other side of the tracks tower new blocks of flats, more than 20 storeys high, waiting for [BUILDINGS ARE PEOPLE metaphorC people] their first residents.

Local governments cannot borrow directly [THE CONDUIT METAPHOR metaphorC transfer] so they borrow through [THE CONDUIT METAPHOR metaphorC transfer] investment vehicles [THE CONDUIT METAPHOR metaphorC transfer] instead [CHANGE IS REPLACEMENT metaphorC replacement].

It might also hurt [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury] the value of the land that local governments have offered as collateral for their borrowings.

Local governments may be more exposed [ECONOMIC ACTIVITY IS A RISK metaphorC risk] & [HARM IS BEING IN A HARMFUL LOCATION metaphorC being in a harmful location].

Many city-dwellers live in dormitories provided [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation lacking a needed metaphorC possessions] by their companies or flats obtained from their state-owned employers after a 1998 reform. If the first customers were also the richest, then China's property market has so far [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through] served [MARKET IS A SERVER metaphorC server] only the top [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Status is Position metaphorC scale] 20-30% of households.

How much they have borrowed is a matter of fierce [THEORETICAL DEBATE IS COMPETITION Theoretical Debate is a Battle metaphorC competition] debate. Victor Shih of Northwestern University, in Illinois, thinks they could already be as high [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorC physical properties] as 11.4 trillion yuan (with another 12.7 trillion in untapped [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Economic Intimacy Is Established By Physical Contact metaphorC physical closeness] lines of bank credit).

But even then the burden [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is a Burden which slows down motion metaphorC preventing forward motion toward a goal] would be little [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorC physical properties] more than 50% in an economy growing [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphorC plants] at over [PROPERTIES ARE PHYSICAL

PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphorc physical properties] 10% in nominal terms.

They are keen to cross the tracks [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Efficient Purposeful Action is Direct Motion to a Destination metaphorc self-propelled motion] to a new home.

In April [(BOUNDED) TIME IS A CONTAINER metaphorc container] they imposed new curbs [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Obstacles to Action are Obstacles to Motion metaphorc self-propelled motion] on housing speculation, raising [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] down-payment requirements and mortgage rates.

In some property hotspots [ECONOMIC AREAS ARE STAGE metaphorc stage], ut-of-towners cannot get a mortgage until they have paid local taxes for at least a year.

What is causing [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION metaphorAC control over an entity relative to a location] food prices to soar [ACTION IS SELF-PEROPELLED MOTION Manner of Action is Manner of Motion metaphorAC self-propelled motion] and what can be done about it?

A property slowdown [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is a Burden which slows down motion metaphorc preventing forward motion toward a goal] might endanger [HARM IS BEING IN A HARMFUL LOCATION metaphorc being in a harmful location] some projects by this yardstick.

The bureau also counts the total sales value of homes—384.6 billion yuan (\$56.3 billion) in April [(BOUNDED) TIME IS A CONTAINER metaphorc container]—and the floorspace sold (72.4m square metres).

The projects financed by these loans make [CREATING IS MAKING metaphorc making] fiscal sense [PROPERTIES ARE POSSESSIONS metaphorc possessions] as long as they add enough to the local tax base to cover [EXTERNAL APPEARANCE IS A COVER Covers Which are Purposefully Put On are Feigned Economic Data metaphorc cover] their costs.

They suffer [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorc physical injury] from a chronic shortfall [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Length & Amount is Verticality metaphorc physical properties] of tax revenues, which they partly fill [ECONOMIC COMPENSATION ARE COVERS FOR THE FACTS metaphorc cover for facts] by expropriating land from farmers and selling it to developers at a hefty [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Weight metaphorc physical properties] markup [ECONOMIC COMPENSATION ARE COVERS FOR THE FACTS metaphorc cover for facts].

They are counting on [MENTAL ACCOUNTING Explaining the Causation is Accounting - Explaining the Causation is Counting the Factors metaphorc accounting] land sales and property taxes for less than 17% of their revenues this year, according to Vincent Chan of Credit Suisse, once fiscal transfers from the central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorc physical properties] government are taken into account [MENTAL ACCOUNTING Explaining the Causation is Accounting - Explaining the Causation is Counting the Factors metaphorc accounting].

4

China is known for [SOCIETY IS A BODY metaphorc body] its plentiful, pliable workers.

China's economic hinterland [SUBJECTS ARE AREAS The Field, After Being Surveyed, May Then Be Used For Agriculture metaphorc areas] remains vast [AMOUNT IS A PHYSICAL PROPERTY is Size metaphorc

physical properties].

If wages continued to rise [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher metaphorC comparison of physical properties] at this pace [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Speed of Progress is Speed of Motion to a Destination metaphorc self-propelled motion], it would mark [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Life is a Journey – Things You Gauge Your Progress by are Landmarks metaphorc journey]a hairpin [PROPERTIES ARE PHYSICAL PROPERTIES - IMPORTANCE IS A PHYSICAL PROPERTY Importance is Interiority metaphorc physical properties] turn [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction] in China's labour market.

China's labour supply is still growing [LABOUR SUPPLY IS PLANT metaphorc plants].

But China's policymakers seem determined to disappoint fortune-hunters [OPPORTUNITIES ARE OBJECTS Serendipitous Opportunity is An Object Easily Accessable Without Effort on the Part of the Experiencer metaphorC objects].

In March Arthur Kroeber of GaveKal Dragonomics, a consultancy, declared the "end of surplus labour" in China.

When it does wages will rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties], eroding [MONEY IS LIQUID metaphorc liquid] the return [CHANGE IS MOTION (Location) Progress is Forward Motion metaphorC motion (location)] on capital.

Some cities, such as Beijing, have announced increases [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties] in their minimum [PROPERTIES ARE PHYSICAL PROPERTIES - VALUE IS SIZE metaphorc physical properties] wages of up [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher metaphorC comparison of physical properties] to 20%.

As Mr Cai and his colleagues wrote presciently last year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorc landscape we move through], the turn [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction] "enhances [PROPERTIES ARE PHYSICAL PERPTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] the labourers' right to speak in the labourer-employer negotiation because labourers can impose stress on employers through voting with [their] feet."

Is China's labour market at a turning-point? [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction]

In fact, there are good reasons to doubt that the turning-point [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction] is here.

But again, this does not in itself mark the turning-point [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction].

On June 6th the owner of Foxconn, an electronics-maker, said that workers at its Shenzhen complex could earn 2,000 yuan (\$293) a month from October if their work was up [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties] to scratch [A FORCE IS A MOVING OBJECT The Object can Hit an Affected Party metaphorC moving object], about double the basic pay it previously offered, following a string [AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphorc physical properties & ECONOMIC DISASTER IS MAKING VISIBLE] of widely publicised [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorc physical properties] suicides.

"For years, businesses have simply assumed that China has an unlimited supply of young people who can be had for modest wages and replaced at will," Mr Kroeber writes. The assumption goes back a long way. [LONGTERM PRUPOSEFUL ACTIVITY IS A JOURNEY metaphorc journey] (News article 4, The

Economist, 10 June 2010)

The subsistence level [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] is only a conventional idea, and conventions change,” Sir Arthur pointed out.

The supply of mobile youngsters may be about to fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] but it is still higher [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] than it was five or ten years ago [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorc landscape we move through], when the cohort of youngsters was unusually small [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties].

They differ from the calculations reported in this newspaper on September 6th 2008 (“Reserve army of underemployed”), which suggested that the supply of twenty-somethings would not peak [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] until after 2015.

Sir Arthur offered several reasons why wages might rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] even before a country reached [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorc self-propelled motion] its turning-point [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction].

With the ageing of the Chinese workforce that premium may rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties].

The “subsistence” wage itself might rise [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties], for example.

Mr Cai believes China has already reached [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorc self-propelled motion] this “Lewisian turning-point[CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction]” and that its arrival [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorc self-propelled motion] can be seen in more assertive workers and wage rises[COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher metaphorc comparison of physical properties].

The pay hikes [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Difficulties are Impediments to Travel metaphorc journey] won [COMPETITION IS COMPETITION FOR DESIRED OBJECTS competition of metaphorc physical properties] by labourers at Honda and Foxconn are unusually big [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties].

The pay hikes [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Difficulties are Impediments to Travel metaphorc journey] follow a period of wage freezes [MONEY IS A LIQUID Money which cannot be accessed is Frozen metaphorc liquid] during the financial crisis, points out Tao Wang of UBS.

By themselves, the pay rises [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties] mostly make up for [MORAL ACCOUNTING-RISTITUTION metaphorc moral] ground [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] lost last year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorc landscape we move through].

On the same day Honda suffered [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorc physical injury] a strike [PEOPLE ARE MACHINES metaphorc machines] in a factory that makes its mufflers and exhaust parts, less than a week after it settled an earlier dispute by offering a 24% pay rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties].

With the ageing of the Chinese workforce that premium may rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties].

About 40% of the country's labour force remain in agriculture, where their productivity is about one-sixth of its level [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] in the rest of the economy.

The capitalist enclaves would reach [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorc self-propelled motion] so deeply into the country's pool [SHAPES ARE CONTAINERS metaphorc containers] of labour that the remaining supply of farmers, traders, dockworkers and bag-carriers would fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] short of [AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphorc physical properties] demand.

Sir Arthur also pointed out that there was often a *gap* [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphorc scale] between the wages paid in the capitalist economy and the subsistence earnings in the hinterland.

At this point [FACTS ARE POINTS metaphorc points], the economy could not grow [ECONOMY IS PLANT Development of Economy is Growth of a Plant metaphorc plants] without wages rising [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties].

But eventually, the economy would reach [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorc self-propelled motion] a turning-point [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorc change of direction].

But the number of youngsters (15-24-year-olds) entering [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY metaphorc journey] the labour force will fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] by almost 30% over the next ten years [(BOUNDED) TIME IS A CONTAINER metaphorc container].

The share is also falling [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] quite slowly: Richard Herd and his colleagues at the OECD think it will take another decade for it to drop [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] to 25%.

To tempt workers over [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Career is a Journey – Career Progress is Vertical Movement metaphorc journey] that cliff [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Career is a Journey – Career Progress is Vertical Movement metaphorc journey], firms have to pay a premium—fumes subsidies and the like.

For as long as that were true, the capitalist enclaves[SHAPES ARE CONTAINERS metaphorc containers] could grow [CAPITALIST IS PLANT metaphorc plants] without wages rising [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphorc physical properties]: they only had to offer workers a little more than could be scraped together [SHAPES ARE CONTAINERS metaphorc containers] in the vast [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorc physical properties] economic hinterland [SUBJECTS ARE AREAS The Field, After Being Surveyed, May Then Be Used For Agriculture metaphorc areas].

Islands of capitalism [SHAPES ARE CONTAINERS metaphorc containers] existed amid a sea [SHAPES ARE CONTAINERS metaphorc containers] of subsistence labour.

Where the islands of capitalism [SHAPES ARE CONTAINERS metaphorc containers] met [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Career is a Journey – Career Progress is Vertical Movement metaphorc journey] the sea of subsistence labour [SHAPES ARE CONTAINERS metaphorc containers], there was not a “beach [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Career is a Journey – Career Progress is Vertical Movement metaphorc journey]”, but a “cliff [LONGTERM PURPOSEFUL ACTIVITY IS

A JOURNEY Career is a Journey – Career Progress is Vertical Movement metaphorc journey]”.

7

Booming [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] sales to fast-growing [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphorc plants] emerging [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorc location (here)] markets—notably Brazil, China and India—have brought [NECESSARY PREREQUISITE FOR CHANGE IS SOURCE OF MOVING ENTITY Necessary Prerequisite for Change of State is Source metaphorC source of moving entity] German industry its strongest quarter in decades.

9

Luxury sales grew [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphorc plants] 20% even during the industry’s annus horribilis [INAPPROPRIATE ECONOMIC ACTIVITY IS A DISASTER metaphorC disaster] last year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorc landscape we move through] and are forecast to boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] by an astounding 30% this year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorc landscape we move through].

The mood in China is even blingier [GOODNESS IS LIGHT metaphorC light].

In five years [(BOUNDED) TIME IS A CONTAINER metaphorc container] China, which already accounts for a tenth of global demand for luxury goods, is predicted to be the third-largest [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTIY – Importance is Size (IMPORTANT IS LARGER SIZE) metaphorc physical properties] market for them.

10

The rise [COMPANIES ARE PEOPLE metaphorc people] of domestic firms in China and India will also challenge [CHANGE OF ECONOMIC STATUS IS COMPETITION metaphorC competition] Western manufacturers, eroding [ECONOMY IS MACHINE metaphorA machines] one of their few sources of growth [COMPANIES ARE PLANTS metaphorA plants].

In contrast, sales those in China boomed [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties], doubling between 2007 and 2010 to make it the largest [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Bigger metaphorc physical properties] auto market in the world.

And although sales will rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] in China, the pace will slow [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Speed of Progress is Speed of Motion to a Destination metaphorc self-propelled motion].

Volvo will struggle [ECONOMIC RECESSION IS AN ADVERSARY metaphorC adversaries] too, in its first full year [TIME IS A CONTAINER (bounded) metaphorc container (bounded)] under Chinese ownership. The economy, which has been fuelled [ECONOMY IS A MACHINE metaphorc machines] by huge government cash injections [ECONOMIC PROBLEM IS A DISEASE metaphorC disease] as well as by property and stock market bubbles [MONEY IS A LIQUID Cash is a Liquid metaphorc liquid], will cool [ECONOMY IS A LIQUID Economy is Frozen metaphorc liquid].

13

Economists will continue [THE PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION metaphorC forward motion] to debate China.

China will struggle [ECONOMIC INFLATION IS AN ADVERSARY metaphorC adversaries] to manage inflation and could experience [COUNTRIES ARE PEOPLE metaphorC people] some interesting developments [ECONOMIC DEVELOPMENTS ARE OBJECTS metaphorC objects] in property markets, but I would be surprised to see [KNOWING IS SEEING Knowing What will Happen is Seeing metaphorC seeing] either a Chinese crash [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL – HARM IS CUASING OBJECT TO BE NONFUNCTIONAL BY DESTROYING IT metaphorC causing functional object to be nonfunctional / functionality / destruction] or the removal [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle of doubts metaphorC preventing forward motion toward a goal] in 2011 [(BOUNDED) TIME IS A CONTAINER metaphorC container (bounded)].

Is the Chinese economy a bubble [ECONOMY IS A BUBBLE metaphorC bubble] waiting to collapse [ECONOMIC ACTIVITIS ARE BUILDINGS metaphorC buildings]?

These and other key questions [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION The Solution is Contained in the Problem metaphorC locked container for its solution] were frequently asked of the Chinese economy over the past year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through].

Can the government manage a soft-landing [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphorC self-propelled motion],?

Are double-digit growth [ECONOMY IS A PLANT metaphorC plants] rates [LINEAR SCALES ARE PATHS metaphorC paths] sustainable [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaing Existence is Maintaining Location Up Here metaphorC location (here)]?

14

The Chinese government would like to see [SOCIETY IS A BODY metaphorC body] the joint ventures it has set up with the likes of GM and Volkswagen (VW) start exporting.

Annual sales growth [ECONOMY IS A PLANT metaphorC plants] is forecast [EXTERNAL CONDITIONS ARE CLIMATE metaphorC climate] to fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] from 30% to around 10% from this year as other parts of the country follow [COMPLIENCE IS FOLLOWING metaphorC following] Beijing's move [ACTION IS MOTION metaphorC motion] to restrict the number of cars in the city.

That should squeeze [MONEY IS A LIQUID metaphorC liquid] the domestic market further, hurt [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury] Western firms selling into China (including the luxury brands enjoying [COMPANIES ARE PEOPLE metaphorA people] a boom [ACTION IS SELF-PEROPELLED MOTION Speed of Action is Speed of Motion metaphorA self-propelled motion], see article) and encourage Chinese manufacturers to look [COMPANIES ARE PEOPLE metaphorC people] abroad.

China too has a surplus of car manufacturers, excess capacity and a problem with demand. Eventually, Chinese cars will flood [PRODUCTS ARE LIQUID metaphorC liquid] into [COUNTRY IS A CONTAINER metaphorA container] American and European markets.

Provided it manages its acquisition well, Geely could use the Volvo brand to grow [BRAND IS A CHILD metaphorC children] in America.

Imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] between surplus and deficit countries before the financial crisis [FINANCIAL CRISIS IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] were undesirable but that cannot absolve [OBLIGATIONS ARE POSSESSIONS metaphorAC possessions] the regulators and central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers in advanced [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE Being Better in a Dynamic Situation is Being Farther Along on a Path metaphorAC paths] countries from their responsibility for the mess [FINANCIAL CRISIS IS A MESS metaphorAC mess].

The world's central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers may have agreed to convene to discuss the matter but it didn't take long [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] for the sniping [WORDS ARE WEAPONS metaphorAC weapons] to begin. The world's central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers may have agreed to convene to discuss the matter but it didn't take long [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] for the sniping [WORDS ARE WEAPONS metaphorAC weapons] to begin. Central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers on the catwalk [ECONOMIC CONFERENCE IS A FASHION SHOW metaphorAC fashion show] in Paris

PARIS, more used to staging fashion shows, put on a celebrity catwalk [ECONOMIC CONFERENCE IS A FASHION SHOW metaphorAC fashion show] of central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers today.

The line-up [COHERENT IS ALIGNED metaphorAC aligned] of big [PROPERTIES ARE PHYSICAL PROPERTIES Importance is Size metaphorAC physical properties] names at a glitzy hotel in the heart [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties & A COUNTRY IS A BODY metaphorA body] of the French capital stretched [DISTANCE IS CLOTH metaphorAC cloth] from Ben Bernanke of the Fed to Zhou Xiaochuan of China,....

One view [IDEAS ARE PERCEPTIONS metaphorAC perceptions] is that the imbalances [ECONOMIC STABILITY IS BALANCE metaphorC balance]—notably the big [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorC physical properties] current-account surplus chalked up [CAUSATION IS WRITING metaphorC writing] by China and the huge [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] deficit in America—were part [CAUSATION IS AN OBJECT metaphorAC objects] of the madness [INAPPROPRIATE ECONOMIC ACTIVITY IS MADNESS metaphorA madness] of America's subprime lending boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties], and that a greater willingness on the part [CAUSATION IS AN OBJECT metaphorC objects] of surplus countries to allow [CAUSATION IS CONTROL OVER AN ENTITY metaphorC entities] their exchange rates [LINEAR SCALES ARE PATHS metaphorC paths] to rise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] and to promote [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] more domestic demand is vital [EXISTENCE IS LIFE metaphorC life] now to sustain [FINANCIAL STABILITY IS MAINTAINING POSITION metaphorC maintaining position / location motion] a healthy [WORLD

ECONOMY IS A BODY metaphorC body] global recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury].

The Fed chief didn't specify China, but it wasn't long before [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through] Mr Zhou was explaining why exchange-rate adjustment [ECONOMY IS A MACHINE metaphorC machines] was inappropriate given the structural fundamentals generating surpluses, such as the ultra-high [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] propensity to save of Chinese households who lack the safety net [ECONOMY IS WAR Save is a Defense metaphorC war] of a public welfare system.

For another, the adjustment [ECONOMY IS A MACHINE metaphorC machines] that China needs may be happening but not necessarily according to the script [ECONOMY IS A DRAMA metaphorC drama].

The line-up [COHERENT IS ALIGNED metaphorAC aligned] of big [PROPERTIES ARE PHYSICAL PROPERTIES Importance is Size metaphorAC physical properties] names at a glitzy hotel in the heart [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties & A COUNTRY IS A BODY metaphorA body] of the French capital stretched [DISTANCE IS CLOTH metaphorAC cloth] from Ben Bernanke of the Fed to Zhou Xiaochuan of China,.... ..

That adjustment [ECONOMY IS A MACHINE metaphorC machines] is in its real exchange rate, which can occur either through [MEANS OF CHANGE IS PATH OVER WHICH MOTION OCCURS metaphorC paths over which motion occurs] a nominal appreciation [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] or by keeping the yuan unchanged [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION - CAUSED CHANGE OF STATE IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION Preventing a New State is Keeping the Affected Party from a New Location metaphorC control over an entity relative to a location] and wages and prices rising [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] faster than in other countries; and there is increasing [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] evidence that this is happening.

Underpinning [THEORETICAL DEBATE IS COMPETITION Theories are Defensible Positions – Theories are Fortifications metaphorAC competition] this debate about imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] is a renewed [CHANGE IS RENEWAL metaphorAC renewal] focus on [IDEAS ARE PERCEPTIONS metaphorAC perceptions] the balance [ECONOMIC STABILITY IS BALANCE metaphorAC balance] of payments.

16

Each proceeds to play down [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorAC scale] the role [ECONOMIC ACTIVITY IS A DRAMA metaphorAC drama] of his own country.

In discussing the link [CAUSES AND EFFECTS ARE LINKED OBJECTS metaphorC linked objects] between high [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] savings rates [LINER SCALES ARE PATHS metaphorC paths] and inadequate social-security systems, he says at one point [ACTION IS SELF-PROPELLED MOTION Action is A Stage in an Action is a Location Along a Path metaphorC self-propelled motion] that the connection [CAUSES AND EFFECTS ARE LINKED OBJECTS metaphorC linked objects] “is based on assumption [THEORETICAL DEBATE IS COMPETITION Theories are Fortifications - Basic Assumptions of a Theory are Foundations metaphorC competition] that

human behaviours are rational.”

America’s Ben Bernanke concedes [THEORETICAL DEBATE IS COMPETITION metaphorA competition] that domestic policies, including “unusually low [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties]” interest rates [LINER SCALES ARE PATHS metaphorA paths], fuelled [ECONOMY IS A MACHINE metaphorA machines] America’s housing boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties]—but blames [RESPONSIBILITIES ARE POSSESSIONS Responsibilities Are Attached To Person / Things (Economic Activities here) Held Responsible metaphorA possessions] excess emerging [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorA location (here)]-market saving for the low [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorc physical properties] rates [LINER SCALES ARE PATHS metaphorC paths].

Their implicit target [ECONOMIC ACTIVITY IS A WAR metaphorC war] is China.

Predictably enough, Zhou Xiaochuan of the People’s Bank of China reckons [MENTAL ACCOUNTING Understanding the Causationg is Adding up / Figuring out metaphorC accounting] that simple adjustments [ECONOMY IS A MACHINE metaphorc machines] in nominal exchange rates [LINER SCALES ARE PATHS metaphorC paths] cannot influence savings behaviour.

The verbal contortions [THE MIND IS A MACHINE metaphorAC machine] reflect deep [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION metaphorAC container] divisions [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphorAC scale], a sense of which can be gleaned [IDEAS ARE PLANTS metaphorAC plants] from a series of papers on imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] written by G20 central-bank [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Impartance is Centrality a physical properties metaphorAC physical properties] governors at the request of the Bank of France*.

17

Bulk [SHAPES ARE CONTAINERS metaphorc containers] ships are the mirror image of container ships: they sail for China fully laden and return nearly [CHANGE IS MOTION (Location) metaphorC motion (location)] empty.

When China’s demand for raw materials surged [DESIRE IS LIQUID metaphorc liquid], sending the Baltic Dry Index soaring [ACTION IS SELF-PEROPELLED MOTION Manner of Action is Manner of Motion metaphorc self-propelled motion] to 11,793 in 2008, ...

... as China’s resilience [COUNTRIES ARE MACHINES metaphorc machines] was buttressed [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorc location (here)] by growth [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphorA plants] ... in America.

Pessimists compare China to Japan in the 1990s [(BOUNDED) TIME IS A CONTAINER metaphorA container], when a rising [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE metaphorc location (here)] & [HIGH STATUS IS UP metaphorA up] economic power, gaining ground [HARM IS LACKING A NEEDED POSSESSION Gain in well-being is gain in possessions lacking a needed metaphorc possessions] on [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorc location (here)] America, suffered [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorc physical injury] an asset bust [HOUSING MARKET IS A BRITTLE OBJECT metaphorc brittle object] that has haunted [KNOWLEDGE OF PAST EVENTS IS AN EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS The Past is a Pursuer metaphorc external event exerting force on] it ever since [TIME IS A LANDSCAPE WE MOVE THROUGH

metaphoric landscape we move through].

18

At the moment [TIME IS A LANDSCAPE WE MOVE THROUGH metaphoric landscape we move through] big [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphoric physical properties] structural shifts, such as the growth [COUNTIES ARE PLANTS metaphoric plants] of China and India, are influencing prices less than one might think.

They could rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphoric physical properties] further [AMOUNT IS A PHYSICAL PROPERTY Amount is length metaphoric physical properties] still if drought lays waste [GRAIN IS A RESOURCE metaphorC resource] to China's wheat harvest, as is feared.

The two Asian giants [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphoric physical properties] are demanding [DESIRES ARE FORCES BETWEEN THE DESIRED AND THE DESIRER metaphorC forces between the desired and the desirer] more food (and more types of food), but so far [TIME IS A LANDSCAPE WE MOVE THROUGH metaphoric landscape we move through] their own farmers have largely [IMPORTANCE IS LARGER SIZE metaphorC size] satisfied that, so they have not needed to trade much (though that would change dramatically [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphoric self-propelled motion] if China were to import wheat this year).

Companies are sounding the alarm [ECONOMIC CRISIS IS ALARM metaphorAC alarm] and the G20 grouping of the world's largest [IMPORTANCE IS LARGER SIZE metaphorAC size] economies has put "food security [ECONOMIC ACTIVITY IS WAR metaphorAC war] " top [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Better rank is higher on list metaphorAC scale] of its 2011 to-do list [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphorAC scale].

Crisis prevention [CRISIS IS DIFFICULTY IS MOVING metaphorAC difficulty]

What is causing [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION metaphorAC control over an entity relative to a location] food prices to soar [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphorAC self-propelled motion] and what can be done about it?

As countries focus on [IDEAS ARE PERCEPTIONS metaphorAC perceptions] food, they need to distinguish between [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphorAC scale] three classes [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Status is Position metaphorAC scale] of problem: structural, temporary and irrelevant.

China, India, Brazil and Russia complain [COUNTRIES ARE PEOPLE metaphoric people] that they do not get the respect [MORAL ACCOUNTING – RECIPROCATION—"One Good Turn" metaphorC moral] they deserve. Here is a chance [OPPORTUNITIES ARE OBJECTS metaphorC objects] for them to earn [MORAL ACCOUNTING – RECIPROCATION—"One Good Turn" metaphorC moral] it by helping underwrite [ECONOMIC ACTIVITY IS WRITING metaphorC writing] a global public good.

19

China's top [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Better rank is higher on list metaphorC scale] e-commerce firm

fighters [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphorC fighting a war] to win [ECONOMIC ACTIVITY IS WAR metaphorC war] back [CHANGE IS MOTION (Location) metaphorC motion (location)] customers' trust

Alibaba, China's leading [E-COMMERCE IS A RACE metaphorC race] e-commerce platform, faces [COMPANIES ARE PEOPLE metaphorC people] the same challenge [ECONOMIC COMPETITION IS WAR metaphorC war], but more so. It operates [COMPANIES ARE MACHINES metaphorC machines] in a country where fraud is rife.

The high-profile [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorC scale] chairman of

Alibaba Group, Jack Ma, issued a letter saying that the firm would prosper [COMPANIES ARE CHILDREN metaphorC children] only by "holding [IDEAS ARE OBJECTS metaphorC objects] on to our ideals and our principles".

Alibaba's internal [COMPANIES ARE CONTAINERS metaphorC containers] investigation attributed [THE EVENT STRUCTURE METAPHORICAL SYSTEM Attributes are Entities metaphorC entities] the fraud to "the pursuit of short-term [TIME IS A CONTAINER (bounded) metaphorC container (bounded)] financial gain at all cost [MORAL ACCOUNTING – RESTITUTION metaphorC moral]" by salespeople and others.

No doubt, but it emerged [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorC location (here)] at a time [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorC landscape we move through] when Alibaba's broader business prospects have seemed to be dimming [HOPE IS LIGHT metaphorC light].

In a market as rapidly evolving [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Speed of Progress is Speed of Motion to a Destination metaphorC self-propelled motion] as Chinese e-commerce, no company has a secure [ECONOMIC ACTIVITY IS WAR metaphorC war] franchise.

It investigated the reports of fraud thoroughly and was forthcoming [EXISTENCE IS A LOCATION (HERE) metaphorC location (here)] in publishing details, in sharp [WORD ARE WEAPONS metaphorC weapons] contrast to some other scandal [IMPROPER ECONOMIC ACTIVITY IS A SCANDAL metaphorC scandal]-tainted [MORALITY IS CLEANLINESS metaphorC cleanliness] Chinese firms.

One view, which the company favours, is that Alibaba's reaction [COMPANIES ARE PEOPLE metaphorC people] demonstrates its underlying [TRUST IS A BUILDING metaphorC buildings] integrity.

The firm has been wooing new customers at a terrific pace [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Speed of Progress is Speed of Motion to a Destination metaphorC self-propelled motion], but even before the scandal [IMPROPER ECONOMIC ACTIVITY IS A SCANDAL metaphorC scandal] broke [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphorC location (here)] its shares had fallen [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] by more than half from the bubbly [MONEY IS A LIQUID Cash is a Liquid metaphorC liquid] days of 2007.

Appendix E Metaphor Corpus A

1

Some in Congress want to make [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphorA self-propelled motion] it easier to impose duties on Chinese imports to compensate [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation metaphorA lacking a needed possession].

Supply-side incentives go [ACTION IS SELF-PROPELLED MOTION Progress is Forward Movement metaphorA self-propelled motion] only so far [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distace From Starting Point metaphorA self-propelled motion].

The Export-Import Bank has authorised record volumes [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] of trade credit, but Fred Hochberg, its president, says America [COUNTRIES ARE PEOPLE metaphora people] still spends [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] less on such efforts [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] than China or Canada [COUNTRIES ARE PEOPLE metaphorC people] do, even though its economy is much larger [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties].

For America it will be tougher [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphora container].

A wider [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] federal deficit offsets private retrenchment but prolongs [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties] America's [COUNTRIES ARE PEOPLE metaphora people] dependence on foreign savings.

The process [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Starting a Purposeful Action is Starting Out for a Destination metaphora self-propelled motion] of rebalancing [ECONOMIC STABILITY IS BALANCE metaphorA balance] America's economy has begun [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Starting a Purposeful Action is Starting Out for a Destination metaphora self-propelled motion].

The president slapped [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphora self-propelled motion] tariffs on cheap tyres from China, proposed making it harder [A PROBLEM IS LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphorA locked container for its solution] for multinationals to defer [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle metaphorA preventing forward motion toward a goal] taxes on profits from abroad, earmarked [PROBLEM IS A TARGET Trying to Solve Problem is Shooting at Target metaphorA target] stimulus money for green-technology investment and agreed to impose “buy American” provisions on anything bought with stimulus funds.

His speeches often sermonized [ECONOMIC ACTIVITY IS RELIGION metaphorA religion] about the evils [FINANCIAL CRISIS IS EVIL metaphorA evil] of bubbles [FINANCIAL CRISIS IS BUBBLE metaphorA bubble], easy [OPPORTUNITIES ARE OBJECTS Serendipitous Opportunity is An Object Easily Accessable Without Effort on the Part of the Experiencer metaphorA objects] credit and borrowing [COUNTRIES ARE PEOPLE metaphora people] from China [COUNTRIES ARE PEOPLE metaphorC people].

Tax credits and mortgage guarantees keep the housing market *a*live [MARKETS ARE BEINGS WITH LIFE CYCLES metaphorA being with life cycles & FAILURE IS DEATH / SUCCESS IS LIFE metaphorA life] yet compound distortions [STATES ARE SHAPES metaphorA shapes] that contributed [CAUSATION IS CONTRIBUTION metaphorA contribution] significantly to the debt mountain [PROPERTIES ARE

PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in the first place [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE metaphora scale].

The private sector remains [STATES ARE LOCATIONS metaphora location] above [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] so weak [ECONOMIC SECTOR IS A BODY metaphora body] that an early and sustained attack [ECONOMIC ACTIVITY IS FIGHTING A WAR Attacking Economic Entities is Attacking a Fortification metaphora fighting a war] on the budget deficit could push the economy back into [CAUSATION IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION – CAUSED CHANGE OF STATE IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION metaphora control over an entity relative to a location] recession [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury].

But they would inflame relations with trading partners, provoke retaliation [ECONOMIC ACTIVITY IS WAR metaphora war] and ultimately slow [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion - Speed of Action is Speed of Motion metaphora self-propelled motion] the restructuring [ECONOMY IS BUILDING metaphora buildings] of the economy towards [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events Detrimental to Action are Opposing Forces metaphora forces affecting forward motion] more productive, export-oriented businesses.

The Federal Reserve at present has little [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] scope to compensate [HARM IS LACKING A NEEDED POSSESSION Restoration is getting a good thing in compensation metaphora lacking a needed possession] because interest rates are already at zero.

Simply put [ARGUMENT IS MOTION metaphora motion], if policymakers get the price signals [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] right, firms [COMPANIES ARE PEOPLE metaphora people] and consumers will of their own accord reorient their efforts away [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphora physical closeness] from consumption and towards [CHANGE OF STATE IS CHANGE OF DIRECTION metaphora direction] exports and cleaner energy.

How the government can help [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Control over Action is Control over Motion metaphora self-propelled motion] things along [A PROBLEM IS A REGION IN A LANDSCAPE Approaches to a Solution are Paths in Landscape metaphora region in a landscape]

UNTIL the financial crisis hit [EFFECTS OF FINANCIAL CRISIS ARE INJURIES metaphora physical injuries], America's mounting [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] imbalances [ECONOMIC STABILITY IS BALANCE metaphora balance] drew scant attention [IDEAS ARE PERCEPTIONS Communication is Showing / Directing Someone's Attention is Directing Their Vision metaphora perceptions] from presidents. ...imbalances [ECONOMIC STABILITY IS BALANCE metaphora balance] have been a recurrent [EXISTENCE IS VISIBILITY metaphora visibility] theme of Barack Obama's.

Mr Obama's supporters on the left want him to attack [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphora war] imbalances [ECONOMIC STABILITY IS BALANCE metaphora balance] by supporting [MAINTAINING EXISTENCE IS SUPPORTING metaphora supporting] domestic manufacturers (an activity delicately termed "industrial policy") and punishing [ACTION ON IS TRANSFERRING AN OBJECT metaphora transferring an object] other countries [COUNTRIES ARE PEOPLE metaphora people], particularly China [COUNTRIES ARE PEOPLE metaphoraC people], that they say trade unfairly.

Import protection [ECONOMIC ACTIVITY IS WAR metaphora war] generally shelters [ECONOMIC ACTIVITY IS WAR metaphora war] the least productive industries and therefore the ones least likely to export.

Yet it will not happen, because a higher [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] petrol tax is politically even more unacceptable to Mr Obama and Congress than cap-and-trade.

Although Mr Obama diagnosed [ECONOMIC PROBLEM IS A DISEASE metaphora disease] the problem correctly, he has yet to come up with [A PROBLEM IS A REGION IN A LANDSCAPE Trying to Solve a Problem is Looking for Solution in the Landscape metaphora region in a landscape] a solution.

Mr Obama initially [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE metaphora scale] shared [INSTINCTS ARE POSSESSIONS metaphora possessions] those instincts.

Mr Obama's free-trade agenda, however, has focused on [IDEAS ARE PERCEPTIONS metaphora perceptions] the enforcement of existing trade laws.

That is Mr Obama's stated aim [PROBLEM IS A TARGET Trying to Solve Problem is Shooting at Target metaphora target], but the prospects for a comprehensive cap-and-trade bill look [A PROBLEM IS A REGION IN A LANDSCAPE Trying to Solve a Problem is Looking for Solution in the Landscape metaphora region in a landscape] poor [WELL-BEING IS WEALTH metaphora wealth].

In energy the necessary price signal [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] is also obvious: raise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] the price of carbon.

In exports the most important price signal [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] is the dollar.

... one of the state's most effective roles [ECONOMIC ACTIVITY IS A DRAMA metaphora drama] was “stimulating or providing demand”.

An alternative would be to raise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] the tax on petrol.

Though he has recently shown [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] renewed [CHANGE IS RENEWAL metaphora renewal] interest in free-trade agreements with Panama, Colombia and South Korea, only the first seems likely to be ready for a Senate vote this year.

The trade deficit has narrowed [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] and exports are rebounding [ECONOMY IS A MACHINE metaphora machines].

On the other hand [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES Comparison of Importance is Weighing metaphora comparison of physical properties] he insisted that those provisions must not run foul of [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events Detrimental to Action are Opposing Forces metaphora forces affecting forward motion] World Trade Organisation rules and refrained from telling bailed-out banks and carmakers how to run [BUSINESSES ARE MACHINES metaphora machines] their businesses.

2

The latest data on existing home sales show [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] a spike [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties]

in activity and the best April performance since 2006 [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

It is unlikely (though not impossible) that prices will plummet [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] once more; price declines [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] are likely to be small [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] relative to those experienced in 2008 and 2009 [TIME IS A CONTAINER metaphora container].

But small [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] declines [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] are enough to do damage.

Can housing markets avoid [MARKETS ARE PEOPLE metaphora people] renewed [CHANGE IS RENEWAL metaphora renewal] decline [BAD IS DOWN metaphora up]?

The latter issue has made for a steady-stream [HOUSING INVENTORY IS LIQUID metaphora liquid] of foreclosed-upon [ECONOMIC SITUATION IS A CONTAINER metaphora container] housing inventory, too substantial to be absorbed [BUYING IS ABSORBING metaphora objects] by new buyers.

Even as the end [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - The End of Action is the End of the Path metaphora self-propelled motion] of government incentive programmes lead [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Control over Action is Control over Motion metaphora self-propelled motion] buyers to exit [ECONOMIC MARKET IS A CONTAINER metaphora container] the market, the number of homes for sale will have grown [ECONOMY IS PLANT metaphora plants] significantly.

And so with government measures winding [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION metaphora forces affecting forward motion] down [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], the housing bust [HOUSING MARKET IS A BRITTLE OBJECT metaphora brittle object] is free [MARKETS ARE PEOPLE metaphora people] to carry on [MARKETS ARE PEOPLE metaphora people] as before.

Just this week [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through], the head [ECONOMIC ADMINISTRATION IS PEOPLE metaphora people] of the Federal Housing Administration declared that, "This is a market purely on life [ECONOMIC MARKETS ARE PEOPLE metaphora people] support [MAINTAINING EXISTENCE IS SUPPORTING metaphora supporting], sustained [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphora location (here)] by the federal government...having FHA do this much volume is a sign [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] of a very sick [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] system."

The federal government may come to [IDEAS ARE LOCATIONS metaphora location] regret [GOVERNMENT ARE PEOPLE metaphora people] its decision [GOVERNMENT ARE PEOPLE metaphora people] to focus on [IDEAS ARE PERCEPTIONS metaphora perceptions] measures aimed at [SALES IS A TARGET metaphora target] encouraging sales, rather than on efforts to deal with negative homeowner equity.

These trends are the more worrisome given the end [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - The End of Action is the End of the Path metaphora self-propelled motion] of the homebuyer tax credit and of Fed purchases of mortgage-backed [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on back) metaphora possessions] securities.

But this was almost certainly due to [CAUSATION IS CONTROL OVER AN OBJECT RELATIVE TO A POSSESSOR Causation is Motion of a Commercial Object Relative to an Affected Party metaphora control over an entity relative to a location] increases [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] the looming [EXISTENCE IS VISIBILITY metaphora visibility] end [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - The End of Action is the End of the Path metaphora self-propelled motion] of the federal tax credit.

Four years after the housing boom reached [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphora self-propelled motion] its apex [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Status is Position metaphora scale] and the bust [HOUSING MARKET IS A BRITTLE OBJECT metaphora brittle object] began, and end [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - The End of Action is the End of the Path metaphora self-propelled motion] to the mess [ECONOMIC CRISIS IS A MESS metaphora mess] remains [STATES ARE LOCATIONS metaphora location] just out of [DIFFICULTIES ARE CONTAINERS metaphora containers] reach [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphora self-propelled motion].

3

The ratio of housing loans to GDP is still only 15.3%, compared with a peak [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B metaphora scale] of 79% in America.

Pessimists compare China to Japan in the 1990s [(BOUNDED) TIME IS A CONTAINER metaphora container], when a rising [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE metaphoraC location (here)] & [HIGH STATUS IS UP metaphoraA up] economic power, gaining ground [HARM IS LACKING A NEEDED POSSESSION Gain in well-being is gain in possessions lacking a needed metaphoraC possessions] on [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphoraC location (here)] America, suffered [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphoraC physical injury] an asset bust [HOUSING MARKET IS A BRITTLE OBJECT metaphoraC brittle object] that has haunted [KNOWLEDGE OF PAST EVENTS IS AN EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS The Past is a Pursuer metaphoraC external event exerting force on] it ever since [TIME IS A LANDSCAPE WE MOVE THROUGH metaphoraC landscape we move through].

And so it's not surprising that prices have also been falling [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] again.

5

With revenue from property taxes down [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], the state budget is \$3.5 billion short [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties].

The boom [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] has left [STATES ARE ABANDONED CHILDREN metaphora children] Florida with an excess of houses, shops and debt

Like many other states, before the bust [HOUSING MARKET IS A BRITTLE OBJECT metaphoraA brittle object] Florida enjoyed [STATES ARE PEOPLE metaphora people] a consumer boom [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] that may have left [STATES ARE ABANDONED CHILDREN metaphoraA children] it with too

many retail outlets.

Florida, with a long [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties] history [ECONOMIC DEVELOPMENT IS HISTORY metaphora history] of property booms [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], played its full part [ECONOMIC CRISIS IS A DRAMA metaphora drama] in the subprime excesses.

In Daytona Beach, an Atlantic resort best known [PLACES ARE PEOPLE metaphora people] for its drag-car racing, estate agents are advertising lists of foreclosed properties for sale.

He reckons [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphora accounting] that Florida's economy faces [SOCIETY IS A BODY metaphora body] “a long [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties] and protracted climb out [ACTION IS SELF-PEROPPELLED MOTION Manner of Action is Manner of Motion metaphora self-propelled motion] of a deep hole [ACTION IS SELF-PEROPPELLED MOTION Obstacles to Action are Obstacles to Motion metaphora self-propelled motion]”, with unemployment remaining [STATES ARE LOCATIONS metaphora location] in double digits until 2012 [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

The effect on the state's overall [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] economy has been huge [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties].

Estate agents reckon [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphora accounting] that prices have fallen [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] 40-50% from their peak [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties].

Florida is not alone [STATES ARE PEOPLE metaphora people] in having to shift away [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphora physical closeness] from consumption and towards [CHANGE OF STATE IS CHANGE OF DIRECTION metaphora change of direction] investment and exports, but its lack of a big [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] manufacturing base [ECONOMIC DEVELOPMENTS ARE BUILDINGS metaphora buildings] makes the task [ECONOMIC DEVELOPMENT IS A TASK metaphora task] more difficult.

This is the Cordoba Ranch, a few miles from Tampa in Florida, one of the many residential developments that were abandoned [ECONOMIC PROJECTS ARE ABANDONED CHILDREN metaphora children] when the American housing market collapsed [ECONOMIC MARKET IS A BUILDING metaphora buildings].

Given the poor [WELL-BEING IS WEALTH metaphora wealth] outlook for jobs and the oversupply of housing, Florida's bad-debt problems are likely to linger [HARM IS PHYSICAL INJURY Harm is Physical Injury due to Sickness metaphora physical injury].

Florida's best-known industry, tourism, has also suffered [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] from the recession [HARM IS PHYSICAL INJURY economic harm is physical injury metaphora physical injury].

It will be 2014 before Florida's payrolls recover [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] to pre-recession [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] levels [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static

Situation is Being Above metaphora scale], he predicts.

Since the government employs one in seven workers, that will mean fewer jobs and cuts [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL – HARM IS CAUSING OBJECT TO BE NONFUNCTIONAL BY DESTROYING IT metaphora causing functional objects to be nonfunctional] in services across the state.

Its main hope for growth [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphora plants] is health care, thanks in part to its large [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] population of retired people.

These melancholy rosters highlight [IDEAS ARE PERCEPTIONS Aids to Gaining Awareness are Aids to Vision metaphora perceptions] the gap [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphora scale] between the grand claims [WORDS ARE OBJECTS metaphora objects] of developers and the cold [AFFECTION IS WARMTH COLD metaphora warmth] reality of market arithmetic [MENTAL ACCOUNTING Understanding the Causationg is Adding up / Figuring out metaphora accounting].

Jobs have evaporated [JOBS ARE LIQUID metaphora liquid], particularly in construction, property and finance; the unemployment rate [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being better in a static situation is being above in explicit ranking metaphora vertical distance] is 12%.

Paradise [ECONOMIC SITUATION IS RELIGION metaphora religion] foreclosed - The boom has left Florida with an excess of houses, shops and debt.

6

With housing showing [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] renewed [CHANGE IS RENEWAL metaphora renewal] weakness [HOUSING MARKET IS A BODY metaphora body], that number may rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties].

Better loan disclosure would help [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Control over Action is Control over Motion metaphora self-propelled motion] investors in mortgage-backed [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on back) metaphora possessions] securities [ECONOMIC ACTIVITY IS WAR metaphora war] to do their own homework rather than just relying on guarantees.

America's thumping [POLICIES ARE PHYSICAL FORCES metaphora physical forces] financial-reform [STATES ARE SHAPES Change of State is Change of Shape metaphora shapes] bill, which was signed into law [LAW IS A CONTAINER metaphora container] by Barack Obama on July 21st, found room in [LEGAL DOCUMENTS ARE CONTAINERS metaphora container] its 2,319 pages to create [SETTING UP AN OFFICE IS CREATION metaphora creation] "Offices of Minority and Women Inclusion" in various federal agencies, but did nothing on Fannie and Freddie. Virtually the only mortgages investors will buy are those guaranteed by the GSEs and other federal agencies.

Even if it were a valid goal [ACTION IS SELF-PREPELLED MOTION Purposeful Action is Directed Motion to a Destination - The End of Action is the End of the Path metaphora self-propelled motion] , there are plenty of countries (Australia, Britain and Canada among them) that have similar or higher levels [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up up metaphora scale] of home ownership with far [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties] less, and in some cases no, systemic government support

[EXISTENCE IS A LOCATION (HERE) –EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphora location (here)] (see article).

The bigger [PROPERTIES ARE PHYSICAL PROPERTIES Importance is Size metaphora physical properties] question is why Fannie and Freddie are needed to achieve them.

The GSEs have guidelines [PRINCIPLES ARE GUIDES metaphora guides] for the types of home loans they can guarantee [COMPANIES ARE PEOPLE metaphora people]: these let Fannie and Freddie colonise [ECONOMIC ACTIVITY IS WAR metaphora war] the safest [ECONOMIC ACTIVITY IS WAR metaphora war], “conforming” bits [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] of the mortgage market (before expanding into dodgier bits [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money]), leaving private lenders to swerve around [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] them into ever-riskier areas [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money].

The next big [PROPERTIES ARE PHYSICAL PROPERTIES Importance is Size metaphora physical properties] task of financial reform [STATES ARE SHAPES Change of State is Change of Shape metaphora shapes]: dismantling [IDEAS ARE PERCEPTIONS Understanding is Seeing – Awareness Despite Hindrance is Seeing Despite Visual Hindrance metaphora perceptions] Fannie and Freddie

The Treasury says [COMMUNICATINO IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] it will put out proposals on the future of Fannie and Freddie early next year but there are few signs [IDEAS ARE PERCEPTIONS Understanding is Seeing Aids to Gaining Awareness are Aids to Vision metaphora perceptions] that politicians are prepared to get rid of [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Emotional Intimacy is Movement Away from Physical Closeness metaphora physical closeness] them altogether.

None of this means [THE CONDUIT METAPHOR The Content is contained in the Stimulus metaphora transfer] it makes sense to get rid of [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Emotional Intimacy is Movement Away from Physical Closeness metaphora physical closeness] Fannie and Freddie in one go [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Emotional Intimacy is Movement Away from Physical Closeness metaphora physical closeness].

A second would be to squeeze [WORDS ARE LIQUID metaphora liquid] the definitions of conforming mortgages over time [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through], so that bit by bit [STATES ARE SHAPES metaphora shapes] Fannie and Freddie lose control [CONTROL OF ECONOMIC STATES ARE OBJECTS metaphora objects] of chunks [STATES ARE SHAPES metaphora shapes] of the prime market.

Although everybody agrees on the need to overhaul [COMPANIES ARE MACHINES metaphora machines] Fannie and Freddie, nobody is rushing [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphora self-propelled motion] to do much about it.

These “government-sponsored enterprises” (GSEs) occupied a grey [GOODNESS IS LIGHT/BADNESS IS DARKNESS metaphora light] area [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] between state and private ownership, benefiting from an implicit government guarantee on their own debt at the same time as they sought to maximise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] profits for shareholders.

The Congressional Budget Office reckoned [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphora accounting] in August 2009 [(BOUNDED) TIME IS A CONTAINER metaphora container] that the twosome [ECONOMIC ACTIVITY IS A GAME metaphora game]'s cost to taxpayers could go as high [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] as \$400 billion.

Virtually the only mortgages investors will buy are those guaranteed by the GSEs and other federal agencies. More than nine in every ten new mortgages written in America during the first quarter of 2010 [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorA landscape we move through] were government-backed [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on back) metaphorA possessions].

Policymakers are horrified by this level [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] of intervention and terrified about withdrawing [ECONOMIC POLICY MAKING IS A WAR metaphorA war] it.

As for liquidity [MONEY IS A LIQUID metaphorA liquid], the argument that America needs [COUNTRIES ARE PEOPLE metaphorA people] Fannie and Freddie because private securitisation markets do not exist to take their place is circular [CAUSES AND EFFECTS ARE LINKED OBJECTS A Repeating Causal Sequence is a Circle metaphorA linked objects].

The failures [ECONOMIC ACTIVITY IS COMPETITION metaphorA competition] of Fannie Mae and Freddie Mac, America's housing-finance giants [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorA physical properties], are glaringly [A PROBLEM IS LIGHT metaphorA light] obvious.

The GSEs' mission [DUTIES ARE MISSIONS metaphorA mission] is to provide “liquidity [MONEY IS A LIQUID metaphorA liquid], stability and affordability” to America's mortgage market.

America's obsession [COUNTRIES ARE PEOPLE metaphorA people] with home ownership is itself questionable, especially now that the trap [KNOWLEDGE OF PAST EVENTS IS AN EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS metaphorA EXTERNAL EVENT EXERTING FORCE ON PRESENT EVENTS] of negative equity has hampered [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle preventing forward motion toward a goal metaphorA preventing forward motion toward a goal] workers' ability to move in search of [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Career is a Journey metaphorA journey] jobs.

American housing would, unfortunately, still have lots of props [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorA location (here)]—agencies such as the Federal Housing Administration and subsidies like tax relief on mortgage interest.

If the GSEs were not there to securitise [ECONOMIC ACTIVITY IS WAR metaphorA war] and guarantee [COMPANIES ARE PEOPLE metaphorA people] prime American mortgages, private firms would take their place [CHANGE IS REPLACEMENT metaphorA replacement].

Funding instruments like covered bonds would give [CAUSAL PRECEDENCE IS TEMPORAL PRECEDENCE metaphorA temporal precedence] investors recourse to banks' balance-sheets [ECONOMIC STABILITY IS BALANCE metaphorA balance] as well as the mortgages themselves in times of crisis [(BOUNDED) TIME IS A CONTAINER metaphorA container].

That hybrid [ECONOMIC MODELS ARE CHILDREN metaphorA children] model granted [CAUSAL PRECEDENCE IS TEMPORAL PRECEDENCE metaphorA temporal precedence] the GSEs access to cheap funding and gave them the incentive to load [INAPPROPRIATE ECONOMIC ACTIVITY IS GETTING A BURDEN metaphorA burden] their retained portfolios with subprime mortgages whilst maintaining [EXISTENCE IS A LOCATION (HERE) Maintaining Existence is Maintaining Location Up Here metaphorA location (here)] capital levels [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] scanty [ECONOMIC ACTIVITY IS A SCANDAL metaphorA scandal] enough to make investment banks blush [BANKS ARE PEOPLE metaphorA people].

There is still the fear that investors would flee [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphorA physical

closeness] the market in times [(BOUNDED) TIME IS A CONTAINER metaphora container] of stress if they did not have a federal guarantee, implicit or otherwise.

It is also easy to see [IDEAS ARE PERCEPTIONS Understanding is Seeing metaphora perceptions] why the firms got [ACTION IS SELF-PROPELLED MOTION Obstacles to Action are Obstacles to Motion metaphora self-propelled motion] into such a mess [ECONOMIC CRISIS IS A MESS metaphora mess].

The two firms, which own [COMPANIES ARE PEOPLE metaphora people] or guarantee [COMPANIES ARE PEOPLE metaphora people] more than half of the country's \$10.7 trillion of mortgages, are awash [MONEY IS LIQUID metaphora liquid] in red ink [MONEY IS LIQUID metaphora liquid].

Tighter [COMPLIANCE IS TIGHTNESS metaphora tightness] underwriting [COMMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS WRITING metaphora linguistic communication] standards would ensure that originators of loans remain [STATES ARE LOCATIONS metaphora location] above [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] disciplined: Britain's plans for a more intrusive mortgage-lending regime provide one source of guidance [PRINCIPLES ARE GUIDES metaphora guides].

The first step [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Starting a Purposeful Action is Starting Out for a Destination metaphora self-propelled motion] is to run off [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Emotional Intimacy is Movement Away from Physical Closeness metaphora physical closeness] or sell their retained portfolios of mortgages.

Set aside the fact that these aims tend to conflict [ECONOMIC ACTIVITY IS WAR metaphora war]: cheerleading [ECONOMIC ACTIVITY IS COMETITION metaphora competition] for cheap mortgages is likely to produce [ECONOMIC INSTABILITIES ARE PRODUCTS metaphora products] instability, for example.

7

Its firms might be more willing to spend their cash if they had a clearer sign [IDEAS ARE PERCEPTIONS Aids to Gaining Awareness are Aids to Vision metaphora perceptions] from Mr Obama how he intends eventually to close [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] container their country's fiscal deficit (and the extra taxes that might entail).

Unemployment, sadly, may thus have deep roots [UNEMPLOYMENT ARE PLANTS metaphora plants], with more people this time remaining out of work [JOBS ARE CONTAINERS metaphora container] for longer.

Firms fearful of weak [A FORCE IS AMOVING OBJECT The Strength of the Object Determines its Ability to Affect Affected Party metaphora moving object] consumer spending are cautious [COUNTRIES ARE PEOPLE metaphora people] about investing.

Some firms have complained [COMPANIES ARE PEOPLE metaphora people] that the available workers do not have the skills that they want.

But a slide [BAD IS DOWN metaphora up] into [CHANGE IS MOTION (Location) metaphora motion (location)] a second recession [HARM IS PHYSICAL INJURY economic harm is physical injury metaphora physical injury] would require firms to cut back [CHANGE IS MOTION (Location) metaphora motion (location)] again on stocks, capital spending and jobs.

But in the short term [TIME IS A CONTAINER (bounded) metaphora container (bounded)] eyes are fixed on [IDEAS ARE PERCEPTIONS The Mind is an eye metaphora perceptions] the Federal Reserve.

American business created only 71,000 in July, too few to match [COMPETITION IS A RACE metaphora race] the growth [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in the population of those of working age and far

[ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Forward Movement metaphora self-propelled motion] too few to shorten the queue [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination Progress is Measured in Distance to Destination or in Distance From Starting Point metaphora self-propelled motion] of unemployed noticeably [EXISTENCE IS VISIBILITY metaphora visibility].

Yet even without a double dip [BAD IS DOWN metaphora up], America could plainly be doing better.

The cash buffer [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora container] corporate America has built up [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora container] in case of harder times makes a fresh shock [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] of that kind unlikely.

So its economic fortunes remain closely tied [RELATIONSHIPS ARE OBJECTS closely interacting with each other metaphora objects] to the rest of the world—including one of its biggest [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Bigger metaphora comparison of physical properties] markets, America.

Unemployment is stuck [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Lack of Progress Toward the Destination is Lack of Motion metaphora self-propelled motion] at 9.5%, even though corporate America is flush [MONEY IS A LIQUID Cash is a Liquid metaphora liquid] with cash.

Fear of renewed [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphora location (here)] recession [HARM IS PHYSICAL INJURY economic harm is physical injury metaphora physical injury injury] in America is overblown [EMOTIONAL STABILITY IS MAINTAINING POSITION metaphora maintaining position].

For all the talk of competition [ECONOMIC DEVELOPMENT IS COMPETITION metaphora competition], politicians in Brussels and Frankfurt should be praying for growth [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphora plants] in America—just as their peers in Washington, DC, should be pleased to hear about China's nouveaux riches ordering German cars and French claret.

This underlines [FINANCIAL SITUATION IS WRITING metaphora writing] the most crucial point [FACTS ARE POINTS (set up in spatial configuration) metaphora points (set up in spatial configuration)] for policymakers: America's and Europe's economic fortunes are as tightly bound [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS metaphora physical closeness] as ever.

Some forecasters [EXTERNAL CONDITIONS ARE CLIMATE metaphora climate] believe that America's disappointing [SOCIETY IS A BODY metaphora body] GDP growth [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in the second quarter, 2.4% at an annualised rate [LINER SCALES ARE PATHS metaphora paths], could be the start [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Starting a Purposeful Action is Starting Out for a Destination metaphora self-propelled motion] of a slide [BAD IS DOWN metaphora up] towards [NECESSARY PREREQUISITE FOR CHANGE IS SOURCE OF MOVING ENTITY Necessary Prerequisite for Change of State is Source metaphora source of moving entity] a second recession [HARM IS PHYSICAL INJURY economic harm is physical injury metaphora physical injury].

Figures published after The Economist went to press were expected to show that the euro area's [MONETARY UNIONS ARE CONTAINERS FOR MONEY metaphora containers for money] economy grew [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] faster than America's in the second quarter.

But on the current evidence don't expect America's recovery [HARM IS PHYSICAL INJURY Economic

harm is physical injury metaphora physical injury] to grind [ACTION IS SELF-PEROPELLED MOTION Speed of Action is Speed of Motion metaphora self-propelled motion] to a halt [THE PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION metaphora forward motion].

Concern about America's stumbling recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] has been rising [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties].

Contrast America's woe [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] with Europe's renewed [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphora location (here)] hope.

That said, both Europe and America seem to be suffering [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] from delusions—of strength [SOCIETY IS A BODY metaphora body] and weakness [SOCIETY IS A BODY metaphora body] respectively.

Then America seemed to be pulling [COMPETITION IS A RACE metaphora race] strongly.

The relatively high level [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up metaphora scale] of job vacancies in America seems consistent with far [ACTION IS SELF-PEROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Forward Movement metaphora self-propelled motion] lower [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] unemployment.

But Americans should take a little heart [SOCIETY IS A BODY metaphora body]: it is too soon to despair [SOCIETY IS A BODY metaphora body] about their economy.

Anxiety about deflation remains justified: any sign [EXISTENCE IS VISIBILITY metaphora visibility] of it would require much bolder measures from the central bank.

Companies are still unhelpfully shy [COUNTRIES ARE PEOPLE metaphora people] of hiring, preferring to squeeze [MONEY IS A LIQUID Control in a Financial Situation is Control in Liquid metaphora liquid] yet more output [PEOPLE ARE MACHINES metaphora machines] from fewer people.

However, for the moment the Fed has sent the right signal [THE CONDUIT METAPHOR The Content travels across to the experiencer; the experiencer understands the content upon reception metaphora transfer]: concern but not panic.

On August 10th the central bank acknowledged that the recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] had slackened [ACTION IS SELF-PEROPELLED MOTION Speed of Action is Speed of Motion metaphora self-propelled motion] and said it would reinvest the proceeds [ACTION IS SELF-PEROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Progress is Forward Movement metaphora self-propelled motion] from the maturing [ORGANISATIONS ARE PEOPLE metaphora people] mortgage securities it owns in government bonds.

The housing bust [HOUSING MARKET IS A BRITTLE OBJECT metaphora brittle object] still casts a shadow [BADNESS IS DARKNESS metaphora darkness].

The recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] momentum in part because shops and warehouses are fuller, so that the initial boost [ACTION IS SELF-PEROPELLED MOTION Manner of Action is Manner of Motion metaphora self-propelled motion] to demand from restocking is fading [EXISTENCE IS VISIBILITY metaphora visibility].

All this stands in the way of [ACTION IS SELF-PEROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Obstacles to Action are Obstacles to Motion metaphora self-propelled motion] a full-blooded recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury].

SELDOM does the United States look at [COUNTRIES ARE PEOPLE metaphora people] Europe with

economic envy [COUNTRIES ARE PEOPLE metaphora people].

How real are the risks of a double dip [BAD IS DOWN metaphora up] in the United States?

8

There are a lot of people from different ideological perspectives [IDEAS ARE PERCEPTIONS metaphora perceptions] who agree that subsidising mortgages isn't a good way [A METHOD IS A PATH metaphora paths] to generate working-class [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Status is Position metaphora scale] wealth going forward [CHANGE IS MOTION (Location) Progress is Forward Motion metaphora motion (location)], and that we should start [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Measured in Distance to Destination or in Distance From Starting Point metaphora self-propelled motion] doing things that are likely to work better.

That leaves the question of what was wrong [IMPROPER ECONOMIC ACTIVITY IS A MISTAKE metaphora mistake] with the housing market.

The first story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] is the one told [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] in the year [(BOUNDED) TIME IS A CONTAINER metaphora container] after the collapse [HOUSING PRICES ARE BUILDINGS metaphora buildings] by people who were close [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS metaphora physical closeness] to the mortgage market.

The data suggest that far from [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphora scale] being forced into [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Control over Action is Control over Motion metaphora self-propelled motion] risky [ECONOMIC ACTIVITY IS A RISK metaphora risk] corners [ECONOMIC MARKET IS A CONTAINER metaphora container] of the market, the institutions under [CONTROL IS UP metaphora up] the scrutiny of the CRA were crowded out [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] by unregulated lenders."

One key piece [CONHERENT IS WHOLE metaphora whole] in the puzzle [ECONOMIC CRISIS IS A PUZZLE metaphora puzzle] was the ability of sophisticated traders in the bond market to game [ECONOMIC ACTIVITY IS A GAME metaphora game] ratings [LINER SCALES ARE PATHS metaphora paths] agencies like Moody's and S&P into [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] mistakenly [IMPROPER ECONOMIC ACTIVITY IS A MISTAKE metaphora mistake] awarding [MAKING INVESTMENT IS A COMPETITION metaphora competition] investment-grade ratings [LINER SCALES ARE PATHS metaphora paths] to CDOs containing [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] large proportions of subprime mortgages.

The evolution [ECONOMIC CHANGE IS EVOLUTION metaphora evolution] of this story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] leads [IDEAS ARE LOCATIONS Reasoning is Following a Path metaphora location] me to believe that what's happening here [EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE metaphora location (here)] is that many people who hold [IDEAS ARE POSSESSIONS metaphora possessions] laissez-faire economic views [IDEAS ARE PERCEPTIONS metaphora perceptions] have [TIME IS A POSSESSION metaphora possessions] an extremely difficult time [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through] accepting that markets can behave [ECONOMIC MARKETS ARE PEOPLE metaphora people] in a collectively irrational [ECONOMIC MARKETS ARE PEOPLE metaphora people] and disastrous [INAPPROPRIATE

ECONOMIC ACTIVITY IS A DISASTER metaphorA disaster] fashion [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion] without any kind of government intervention [GOVERNMENTS ARE PEOPLE people metaphora self-propelled motion].

This is the story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphorA linguistic communication] Mr Rajan endorses when he speaks of government sending a "wall [STATES ARE SHAPES metaphorA shapes] of money" to encourage lending to non-creditworthy borrowers, in order to raise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] homeownership levels [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up metaphora scale].

Mr Rajan doesn't explain what he's referring to when he speaks of a "tsunami [EXTERNAL CONDITIONS ARE CLIMATE metaphorA climate] of money directed [MONEY IS A MOVING OBJECT The Object has a Goal and Direction metaphorA moving object] by a US Congress, worried about growing [ECONOMIC PROBLEMS ARE PLANTS metaphorA plants] income inequality [ECONOMIC STABILITY IS BALANCE metaphorA balance], towards [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION Beneficial Events are Forces Moving toward your Destination metaphorA forces affecting forward motion] expanding [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] low [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] income housing".

Dean Baker agrees with Raguram Rajan that, if you can't turn [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction] Fannie and Freddie back [CHANGE IS MOTION (Location) Progress is Forward Motion metaphorA motion (location)] into simple government entities that hold [POSSESSING IS HOLDING metaphorA holding] mortgage bonds rather than securitising them, you should just eliminate [EXISTENCE IS LOCATION (HERE) metaphora location (here)] them entirely and let the private market [ECONOMIC MARKETS ARE PEOPLE metaphora people] handle [THE MIND IS A BODY Mental Control is Hand Control – Being in Control of S.T. is Having it in Hand metaphora body] it. But the final [FINAL STATES ARE FINAL LOCATIONS metaphora location] point [IDEAS ARE PERCEPTIONS Understanding is Seeing – Aids to Gaining Awareness are Aids to Vision metaphora perceptions] I want to make is that, for the purpose of deciding what should be done [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - A Different Means of Achieving the Purpose is a Different Path metaphora self-propelled motion] with Fannie and Freddie, I'm not sure how much this argument matters.

Others focused not on [IDEAS ARE PERCEPTIONS metaphora perceptions] the CRA story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphorA linguistic communication], but on the role played by [ECONOMIC ACTIVITY IS A DRAMA metaphorA drama] Fannie Mae and Freddie Mac in promoting [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphora scale] homeownership.

As Fannie Mae and Freddie Mac were trying to recover [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] from their accounting scandals [IMMORAL ECONOMIC ACTIVITY IS A SCANDAL metaphorA scandal], a new and ultimately mortal threat [ECONOMIC ACTIVITY IS A WAR metaphora war] emerged [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)].

To make a long story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphorA linguistic communication] short: the reason there was too much credit available to

subprime borrowers was, in large measure [PROPERTIES ARE PHYSICAL PROPERTIES - IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorA physical properties], financial innovation.

My other colleague likes the part of Mr Rajan's argument that blames [RESPONSIBILITIES ARE POSSESSIONS metaphorA possessions] the government, which Mr Rajan says pressed [MONEY IS A LIQUID metaphorA liquid] for more access [MONEY IS A LIQUID metaphorA liquid] to mortgage credit for low-income [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] borrowers.

Obviously, it was extending [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] too much credit to people who had no realistic prospect of paying back their debts.

Meanwhile, the government intervention that everyone agrees played a major role [ECONOMIC ACTIVITY IS A DRAMA metaphorA drama], the Fed's decision to keep interest rates unusually low [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties], doesn't seem to be the focus [IDEAS ARE PERCEPTIONS metaphorA perceptions] of the argument that the government is responsible [RESPONSIBILITIES ARE POSSESSIONS Responsibilities Are Attached To Person / Things (Economic Activities here) Held Responsible metaphorA possessions] for the crisis.

If the CRA was largely irrelevant, and Fannie and Freddie were also-rans [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphorA physical closeness], it seems hard [AN IDEA IS A LOCKED CONTAINER Difficulty is Hardness of Object metaphorA locked container] to understand how one could put government at the heart of [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorA physical properties] the crisis [CRISIS IS A BODY metaphorA body].

Yet a lot of people seem to be seeking for a way [THE CONDUIT METAPHOR The Content travels across to the experiencer metaphorA transfer] to claim [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphorA linguistic communication] that government distortion [ECONOMIC MARKET IS A MACHINE metaphorA machines] of the real-estate market played a key role [ECONOMIC CRISIS IS A DRAMA metaphorA drama] in this crisis, even though the evidence [A PROBLEM IS A REGION IN A LANDSCAPE Evidence is a Guide in the Search metaphorA region in a landscape] shows [IDEAS ARE PERCEPTIONS Communication is Showing metaphorA perceptions] that what changed [CHANGE IS MOTION metaphorA motion] was not government, but financial markets.

Raguram Rajan is among those who think that income inequality played a role [ECONOMIC CRISIS IS A DRAMA metaphorA drama] in precipitating [MONEY IS A LIQUID - ECONOMIC CRISIS IS PRECIPITATE metaphorA liquid] the global financial crisis.

As we all know, the collapse [HOUSING PRICES ARE BUILDINGS metaphorA buildings] of housing prices didn't, in itself [THE BODY IS A CONTAINER FOR THE SELF metaphorA container for the self], cause the global financial crisis.

How exactly did inequality fuel [ECONOMY CRISIS IS A MACHINE metaphorA machines] the crisis?

The financial crisis was caused by the interlinkage between [CAUSES AND EFFECTS ARE LINKED OBJECTS metaphorA linked objects] housing prices and vast [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] quantities of derivatives based on [ECONOMIC VALUES ARE BUILDINGS metaphorA buildings] those prices, and on the value of the loans taken out [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers for money] to finance them, held [POSSESSING IS HOLDING metaphorA holding] by a global web [ECONOMIC SYSTEM IS A WEB metaphorA web] of financial institutions trying (in theory) to hedge [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers for money] themselves against [ECONOMIC ACTIVITY IS A WAR

metaphora war]...the risk [ECONOMIC ACTIVITY IS A RISK metaphora risk] of a collapse [HOUSING PRICES ARE BUILDINGS metaphora buildings] in housing prices [ECONOMIC VALUES ARE CONTAINERS metaphora containers].

For the GSEs, as for Lehman Brothers and others, the subprime crisis was merely "The Final [FINAL STATES ARE FINAL LOCATIONS metaphora location] Blow [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events that Affect Action are Forces that Affect Motion metaphora forces affecting forward motion]":

Fundamentally [IDEAS ARE BUILDINGS metaphora buildings], if the CRA were forcing banks to lend to people they considered unprofitable, one would have expected to hear bankers complaining about it.

The same derivatives and hedging [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] that, at the global level [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up metaphora scale], encouraged bankers to systematically take on too much risk [ECONOMIC ACTIVITY IS A RISK metaphora risk] were, at the granular level [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up metaphora scale], supplying the credit that encouraged mortgage originators [ECONOMIC STARTERS ARE CREATORS metaphora creator] to hand out risky [ECONOMIC ACTIVITY IS A RISK metaphora risk] loans.

In fact, subprime lending was more frequent outside [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] the CRA areas [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] than inside [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] them: "While banks did engage in subprime lending in their [CRA] assessment areas, they did so at a lower [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] rate [LINER SCALES ARE PATHS metaphora paths] than the market in general and accounted for only a small [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] fraction of subprime loans to lower-income [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] borrowers and lower-income [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] neighborhoods.

In this story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication], what was wrong [IMPROPER ECONOMIC ACTIVITY IS A MISTAKE metaphora mistake] with the housing market was that government had encouraged [GOVERNMENTS ARE PEOPLE metaphora people] or forced banks to lend to subprime borrowers.

Initially, those who argued [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] that government had caused the problems in [ECONOMIC MARKET IS A CONTAINER metaphora container] the housing market focused on [IDEAS ARE PERCEPTIONS metaphora perceptions] the Community Reinvestment Act, which required banks to make loans in lower-income [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] neighbourhoods.

That story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] is that mortgage originators [ECONOMIC STARTERS ARE CREATORS metaphora creator] no longer had [ECONOMIC INTERESTS ARE POSSESSIONS No Longer Believing is No Longer Having in Possession metaphora possessions] any interest in whether or not homeowners could actually pay back their mortgages, since they were selling those mortgages immediately to mortgage bundlers [STATES ARE SHAPES metaphora shapes], who then sold them to

banks, who then turned them into [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction] collateralised debt obligations (CDOs) and sold them to hedge [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] funds, who, beginning in 2005 [(BOUNDED) TIME IS A CONTAINER metaphora container] or so, started [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Starting a Purposeful Action is Starting Out for a Destination metaphora self-propelled motion] taking out [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] CDSs on the CDOs.

Here, there are two stories [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphoraA linguistic communication].

But let me lay out [IDEAS ARE OBJECTS metaphoraA objects] what sounds [PERCEPTION IS RECEPTION metaphoraA reception] unconvincing to me about this part [PERCEPTION IS SHAPE RECOGNITION metaphoraA shapes recognition] of Mr Rajan's story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphoraA linguistic communication].

The second story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphoraA linguistic communication] developed [IDEAS ARE CHILDREN metaphoraA children] a bit later than the first story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphoraA linguistic communication].

If that part of the story [COOMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphoraA linguistic communication] is to be believable, he needs to be clearer about what he means.

But the scandal [IMMORAL ECONOMIC ACTIVITY IS A SCANDAL metaphoraA scandal] was that they were using that advantage [PROPERTIES ARE TOOLS metaphoraA tools] to goose profits, not to buy up [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] more subprime loans; and they'd used accounting tricks [IMMORAL ECONOMIC ACTIVITY IS A GAME metaphoraA game] to hide [IDEAS ARE PERCEPTIONS Communication is Showing – Through the use of covers metaphora perceptions] those higher [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties] profits.

9

Luxury sales there slumped [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] by 18% last year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphoraA landscape we move through].

Pockets [SHAPTE ARE CONTAINERS metaphora container] of confidence in America help.

10

There will be thousands more lay-offs, wailing headlines and much wringing of hands, especially in government offices in America and Europe.

Consumers in America and Europe will become more price-conscious, buying smaller, cheaper cars instead of profitable hunks-on-wheels [STATES ARE SHAPES metaphoraA shapes].

Sales plummeted [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in America to levels [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B More is Up, High Status is Up metaphora scale] last seen [EXISTENCE IS VISIBILITY metaphoraA visibility] in the early 1970s [TIME IS A CONTAINER (bounded) metaphora container (bounded)]—almost 40% below their highest point [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical

properties].

American demand will rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] only slightly, if at all.

Global sales of cars, buses and trucks peaked [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] along with the American economy in 2007.

Although they have shed [MONEY IS A LIQUID Cash is a Liquid metaphora liquid] billions of dollars in debt and tens of thousands of employees, they remain financially weak [SOCIETY IS A BODY metaphora body], with tattered [MORALITY IS CLOTH metaphora cloth] reputations.

Sales dropped [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] even further [AMOUNT IS A PHYSICAL PROPERTY Amount is length metaphora physical properties] in 2009 [(BOUNDED) TIME IS A CONTAINER metaphora container], despite government bail-outs and subsidies for new-car buyers.

Despite the developed-market slump [BAD IS DOWN metaphora up] since 2007, almost no big [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Bigger comparison of metaphora physical properties] car plants have been closed.

Car sales down [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties], recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] services suspended [CHANGE IS MOTION (Location) Progress is Forward Motion metaphora motion (location)]

Carmakers flooded [PRODUCTS ARE LIQUID metaphora liquid] the market with unprofitable cars in the good times in an effort to stave off the closure of uneconomic factories.

Consumers in America and Europe will become more price-conscious, buying smaller, cheaper cars instead of profitable hunks-on-wheels [STATES ARE SHAPES metaphora shapes].

As most of the world's big [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Bigger comparison of metaphora physical properties] economies withered [ECONOMIES ARE PLANTS metaphora plants] the following year, the market shrank [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] by more than 6%, a rate [LINER SCALES ARE PATHS metaphora paths] of decline [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] not seen for decades.

For consumers, who have seen the real costs of motoring fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] for more than two decades, this will reverse [CHANGE IS MOTION (Location) Progress is Forward Motion metaphora change of direction (motion)] a trend they have become overly used to.

This fall in global sales spells [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphora accounting] trouble for some of the world's auto giants [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphora physical properties].

For other carmakers the troubles of these weaker [SOCIETY IS A BODY metaphora body] firms will come as welcome news.

In America, GM and Chrysler, which have received large [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] government handouts, face [SOCIETY IS A BODY metaphora body] particular problems.

With a declining [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] market, no chance of government support and a cash-strapped [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Obstacles to Action are Obstacles to Motion metaphora self-propelled motion] parent [COMPANIES ARE PEOPLE

metaphora people], it faces [COMPANIES ARE PEOPLE metaphora people] tough [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphora container] choices. When times got tough [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphoraA locked container for its solutions], they looked to [SEEING IS TOUCHING, EYES ARE LIMBS Looking At Something On Purpose is Touching it With Eyes or Glance metaphoraA touching] governments to provide another cushion [ACTION IS SELF-PEROPELLED MOTION Speed of Action is Speed of Motion metaphora self-propelled motion] through subsidies.

The industry has been burdened [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is a Burden which slows down motion metaphoraA preventing forward motion toward a goal] with at least 50% too much capacity for years.

Most of the industry's troubles are self-inflicted [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury].

The world's auto industry will suffer [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] a fourth year of poor [WELL-BEING IS WEALTH metaphoraA wealth] sales in 2011.

With the housing market still in the doldrums [EXTERNAL CONDITIONS ARE CLIMATE metaphora climate] and cash-for-clunker subsidies at an end [ACTION IS SELF-PEROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Progress is Measured in Distance to Destination or in Distance From Starting Point metaphora self-propelled motion], consumers will be wary about buying big-ticket [VALUE IS SIZE metaphoraA size] items.

Luxury carmakers will see [COMPANIES ARE PEOPLE metaphora people] their sales divide—surging [MONEY IS A LIQUID metaphoraA liquid] & [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in developing markets and sinking [MONEY IS A LIQUID metaphoraA liquid] & [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in developed ones.

With lower [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties] sales and higher [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties] costs, carmakers will have to raise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] prices, the last thing they need at a time of weak [DESIRES ARE FORCES BETWEEN THE DESIRED AND THE DESIRER The Force may be within the Desirer metaphoraA forces between the desired and the desirer] demand.

Input prices will rise [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], and new emissions regulations will require additional R&D spending.

Sooner or later, rising [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] interest rates [LINER SCALES ARE PATHS metaphoraA paths] will accelerate [ACTION IS SELF-PEROPELLED MOTION Speed of Action is Speed of Motion metaphora self-propelled motion] the trend.

Yet the decline [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] and recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] were very uneven [ECONOMIC STABILITY IS BALANCE metaphoraA balance].

Despite industry expectations for a sustained recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury], the outlook for 2011 has clouded [HOPE IS LIGHT metaphoraA light].

Without the recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] they were banking on, the fallout [BELIEFS ARE LOCATIONS metaphora location] from such folly

will become clear [EXISTENCE IS VISIBILITY metaphorA visibility] in 2011 [TIME IS A CONTAINER (bounded) metaphorA container (bounded)].

Italy's Fiat will also find 2011 hard going, as it gets held [POSSESSING IS HOLDING metaphorA holding] back [ACTION IS SELF-PEROPELLED MOTION Negative Progress is Backward Movement metaphorA self-propelled motion] by its Chrysler alliance [COUNTRIES ARE PEOPLE metaphorA people] and weak [SOCIETY IS A BODY metaphorA body] domestic sales.

Fuel and vehicle taxes will go up [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] in many places.

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The states, in turn [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction], can't support [EXISTENCE IS A LOCATION (HERE) –EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorA location (here)] troubled [HARM IS BEING IN A HARMFUL LOCATION metaphorA Being in a harmful location] municipalities indefinitely.

With the Republicans in the ascendancy, federal aid [FINANCIAL AID IS AN ENTITY metaphorA entities] for states is likely to be cut [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL – HARM IS CAUSING OBJECT TO BE NONFUNCTIONAL BY DESTROYING IT metaphorA causing functional objects to be nonfunctional].

Newspapers are full of stories [NEWSPAPERS ARE STORYBOOKS metaphorA storybook] about cities that have gone [CHANGE IS MOTION (Location) metaphorA motion (location)] bust [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL metaphorA destruction] (such as Vallejo, California), are on the verge [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers for money] of doing so (Pennsylvania's capital, Harrisburg), or have been reduced [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] to begging from [ASKING FOR MONEY IS BEGGING metaphorA begging] churches and other tax-exempt organisations (Mount Clemens, Michigan).

The overall [ECONOMIC DATA IS A WHOLE metaphorA whole] default rate is a mere 0.3%.

For instance, an increase [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] in consumption [CONSUMPTION IS A CONTAINER metaphorA container] would benefit Florida [STATES ARE PEOPLE metaphorA people], which gets the bulk [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Weight metaphorA physical properties] of its revenues from a sales tax, more than Oregon, which relies chiefly [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphorA precedence] on income tax.

Thousands of state and local entities should pray [ECONOMIC ACTIVITY IS RELIGION metaphorA religion] the comparison ends [ACTION IS SELF-PROPELLED MOTION Final States are Final Locations metaphorA self-propelled motion] there.

The mortgage parallel [EVALUATIVE CAOMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorA scale]

The mortgage parallel [EVALUATIVE CAOMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorA scale]

Nerves jangle [EMOTION IS LOUD SOUND metaphorA sound] again in a huge [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] and supposedly stable [ECONOMIC STABILITY IS BALANCE metaphorA balance] market

Bond insurers, who used to cover [MARKET SHARE IS AREA metaphorA areas] roughly half of the market [PROPERTIES ARE PHYSICAL PROPERTIES - IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorA physical properties], have retrenched or gone [CHANGE IS MOTION (Location) metaphorA motion (location)] bust [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL metaphorA destruction] after making bad [WRONG ECONOMIC DECISIONS ARE BADNESS metaphorA badness] mortgage bets [ECONOMIC ACTIVITY IS A GAMBLE metaphorA gamble].

The disappearance [EXISTENCE IS VISIBILITY metaphorA visibility] of market props [EXISTENCE IS A LOCATION (HERE) - EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here location up metaphorA location (here)] has not helped [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Control over Action is Control over Motion metaphorA self-propelled motion], either.

It was a tough [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION Difficulty is Hardness of Object metaphorA container] market, to put [IDEAS ARE OBJECTS metaphorA objects] it mildly [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force metaphorA physical forces],” says a spokesman for the state’s treasurer.

With tax receipts down [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] and pension and health-care schemes underfunded [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties], many states and local governments are stretched [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Lack of Progress Toward the Destination is Lack of Motion metaphorA self-propelled motion].

As the market grew [ECONOMIC MARKET IS PLANT metaphorA plants] more volatile [ECONOMIC INSTABILITY IS MADNESS metaphorA madness] many fund investors fled [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Away from Economic Intimacy is Movement Away from Physical Closeness metaphorA physical closeness] on the assumption [THEORETICAL DEBATE IS COMETITION Theories are Fortifications - Basic Assumptions of a Theory are Foundations metaphorA competition] that “there’s no smoke [BAD ECONOMIC SITUATION IS ON FIRE metaphorA fire] without fire [BAD ECONOMIC SITUATION IS ON FIRE metaphorA fire]”, says George Friedlander of Citigroup.

Some leveraged [ECONOMIES ARE MACHINES metaphorA machines] funds fell [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] by more than 10% in a few days [(BOUNDED) TIME IS A CONTAINER metaphorA container (bounded)].

They hope the widely [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] held [IDEAS ARE POSSESSIONS metaphorA possessions] view [IDEAS ARE PERCEPTIONS metaphorA perceptions] that muni defaults are unlikely will be proved as big [PROPERTIES ARE PHYSICAL PROPERTIES - IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorA physical properties] a misconception as the notion that house prices never fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties].

For many municipal borrowers, moreover, debt service holds [POSSESSING IS HOLDING Retaining a position is holding metaphorA holding] priority [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphorA precedence] over [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorA scale] most other obligations.

Analysts at S&P reckon [MENTAL ACCOUNTING Understanding the Causationg is Adding up / Figuring out metaphorA accounting] that the revenues of large states, such as Texas, California and New York,

would have to fall [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] by 45% or more for debt service to be jeopardized [ECONOMIC SITUATION IS A THREAT metaphora threat].

Some are already pulling back [CHANGE OF STATE IS CHANGE OF DIRECTION metaphora change of direction]: New Jersey, for instance, recently said [STATES ARE PEOPLE metaphora people] it would stop [CHANGE IS MOTION metaphora motion] servicing debt that it had been repaying [OFFERING MONEY IS FULLFILING A DUTY metaphora duty] on behalf of [STATES ARE PEOPLE metaphora people] a struggling [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphora fighting a war] county since 1999 [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

A sale of \$4 billion in longer-term debt went [LONGTERM PURPOSEFUL ACTION IS A JOURNEY metaphora journey] better, but still at painfully [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] high [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] yields.

On November 18th California sold [STATES ARE PEOPLE metaphora people] \$10 billion of notes but at higher [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher metaphora comparison of physical properties] yields than it had expected [STATES ARE PEOPLE metaphora people].

It regained [CHANGE IS GETTING Regaining a Property is Regaining a Possession metaphora getting] its poise [ECONOMIC MARKETS ARE PEOPLE metaphora people], however, and has rallied [ECONOMIC ACTIVITY IS WAR metaphora war] strongly [ECONOMIC MARKET IS A BODY – ECONOMIC FITNESS IS PHYSICAL FITNESS metaphora body] in the past two years [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through]. Now a sudden jump [PROPERTIES ARE PHYSICAL PROPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in yields has renewed [CHANGE IS GETTING Regaining a Property is Regaining a Possession metaphora getting] fears that the main source [MONEY IS A LIQUID metaphora liquid] of finance for America's 50 states and thousands of towns and cities is ripe [ECONOMIC CRISIS IS PLANT metaphora plants] for a crisis all of its own.

HABITUALLY seen [IDEAS ARE PERCEPTIONS Understanding is Seeing metaphora perceptions] as safe [ECONOMIC ACTIVITY IS WAR metaphora war], America's \$2.8 trillion municipal-bond market was rocked [LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY Difficulties are Impediments to Travel metaphora journey] in the crisis of 2008 [TIME OF CRISIS IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

As a result, municipal defaults should remain [STATES ARE LOCATIONS metaphora location] low [COMPARISON OF PROPERTIES IS COMPARISON OF PHYSICAL PROPERTIES More is Higher comparison of metaphora physical properties] relative to similarly rated [LINER SCALES ARE PATHS metaphora paths] corporate credit, argues Mr Friedlander.

But faith [BELIEFS ARE OBJECTS metaphora objects] in these scores [ECONOMIC ACTIVITY IS A GAME metaphora game] has dwindled since the subprime crisis [ECONOMIC CRISIS IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

Investors depend on credit ratings [LINER SCALES ARE PATHS metaphora paths], given municipal borrowers' lack of transparency [IDEAS ARE PERCEPTIONS Understanding is Seeing - Impediments to Awareness are Impediments to Seeing metaphora perceptions].

But investors will have to work to separate [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphora scale] the prudent from the profligate.

Finally, the value of subprime and Alt-A mortgage bonds has soared [ACTION IS SELF-PEROPELLED MOTION Manner of Action is Manner of Motion metaphorA self-propelled motion] in secondary markets this year, assuaging [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force Psychological Benefit is Physical Benefit metaphorA physical forces] investor anger.

More and more investors are coalescing into [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Change Toward Economic Intimacy is Movement Toward Physical Closeness metaphorA physical closeness] groups, hopeful of reaching [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Economic Intimacy is Established By Physical Contact metaphorA physical closeness] the threshold [INVESTMENTS ARE BUILDINGS metaphorA buildings] at which they can instruct [INVESTMENTS ARE CONSTRUCTED OBJECTS Making Investments is Building metaphorA constructed objects] mortgage-pool [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers for money] trustees to act against [ECONOMIC ACTIVITY IS A WAR metaphorA war] servicers (25% of note-holders in a given issue).

Worse, investors in mortgage-backed [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on back) metaphorA possessions] securities [ECONOMIC ACTIVITY IS WAR metaphorA war] (MBSs) are trying to make [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphorA self-propelled motion] the banks that underwrote [COMMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS WRITING metaphorA linguistic communication] the deals buy them back [CHANGE IS MOTION (Location) metaphorA motion (location)] at par.

Investors may have to go to [A PROBLEM IS A REGION IN A LANDSCAPE Approaches to a Solution are Paths in Landscape metaphorA region in a landscape] law just to gain access to [A PROBLEM IS A REGION IN A LANDSCAPE Approaches to a Solution are Paths in Landscape metaphorA region in a landscape] loan files.

Dozens have, for instance, joined [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Economic Bonding is Physical Bonding metaphorA physical closeness] a clearing [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle metaphorA preventing forward motion toward a goal] house [INVESTMENTS ARE BUILDINGS metaphorA buildings] for investors run [ECONOMIC ORGANIZATIONS ARE MACHINES metaphorA machines] by a litigator based in Dallas.

So, it could be a hard slog [ACTION IS SELF-PROPELLED MOTION Purposeful Action Obstacles to Action are Obstacles to Motion metaphorA self-propelled motion] for investors.

And the right [ECONOMIC RIGHTS ARE ENTITIES metaphorA entities] of mortgage servicers (which administer payments to investors) to foreclose on loans that were sliced [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL – HARM IS CAUSING OBJECT TO BE NONFUNCTIONAL BY DESTROYING IT metaphorA causing functional objects to be nonfunctional] and diced [HARM IS CAUSING FUNCTIONAL OBJECTS TO BE NONFUNCTIONAL – HARM IS CAUSING OBJECT TO BE NONFUNCTIONAL BY DESTROYING IT metaphorA causing functional objects to be nonfunctional] in securitisations [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers for money] is being challenged [ECONOMIC COMPETITION IS WAR metaphorA war] by, among others, the United States Trustee Programme, the arm [ECONOMIC DEPARTMENT IS A BODY metaphorA body] of the Justice Department with the job [OBLIGATIONS ARE POSSESSIONS Being Assigned Obligation is Receiving Burdens metaphorA possessions] of protecting [ECONOMIC ACTIVITY IS WAR metaphorA war] the integrity [ECONOMIC SYSTEM IS WHOLE metaphorA whole] of the bankruptcy system.

He is trying to create [THINKING IS CREATING metaphorA creating] structures [IDEAS ARE OBJECTS - IDEAS ARE CONSTRUCTED OBJECTS Thinking is Building metaphorA constructed objects] that would allow investors to join suits anonymously, thus avoiding retribution.

He has vowed [COMMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH

metaphorA linguistic communication] to stand firm against [ECONOMIC ACTIVITY IS A WAR Banks are defensible Positions metaphora war] “people who come back [CHANGE IS MOTION (Location) Progress is Forward Motion metaphora motion (location)] and say, ‘I bought a Chevy Vega but I want it to be a Mercedes.’”

Bond insurers such as MBIA and Assured Guaranty, which took hits [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] on mortgage securities they had “wrapped” [ECONOMIC INTIMACY IS PHYSICAL CLOSENESS Economic Bonding is Physical Bonding metaphora physical closeness] with credit enhancement [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], are becoming more active [ECONOMIC DEPARTMENTS ARE PEOPLE metaphora people] too.

So shoddily [MORTGAGE SECURITIES ARE PRODUCTS OF LOW QUALITY metaphora products] were these securities [ECONOMIC ACTIVITY IS WAR metaphora war] cobbled together [MORTGAGE SECURITIES ARE GETTING DESTROYED metaphora getting destroyed] in 2005-07 [(BOUNDED) TIME IS A CONTAINER metaphora container] that analysts at Compass Point Research & Trading, a broker, reckon [MENTAL ACCOUNTING Understanding the Causation is Adding up / Figuring out metaphora accounting] loan “putbacks” [CAPITALS ARE OBJECTS metaphora objects] could cause more than \$130 billion in losses [CHANGE IS GETTING / LOSING (Object) metaphora getting an object], almost half of them to be borne [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens metaphora possessions] by JPMorgan Chase and Bank of America (BoFA), whose purchase of Countrywide greatly increased [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] its exposure [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money].

AMERICA'S foreclosure scandal [INAPPROPRIATE ECONOMIC ACTIVITY IS A SCANDAL metaphora scandal] is still reverberating [CHANGE OF STATE IS CHANGE OF DIRECTION metaphora change of direction].

In the vanguard [ECONOMIC ACTIVITY IS WAR metaphora war] of this battle [ECONOMIC ACTIVITY IS A BATTLE metaphora war] are Fannie Mae and Freddie Mac, America's nationalised housing agencies, which have so far forced [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphora self-propelled motion] banks to take back [CHANGE OF STATE IS CHANGE OF DIRECTION metaphora change of direction] \$13 billion-worth of dodgy debt.

The American mortgage mess [ECONOMY IS A MESS]

Mortgage servicers got a shock [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] in October when a group of fund managers and others (including the Federal Reserve Bank of New York) threatened [ECONOMIC ACTIVITY IS A WAR metaphora war] legal action against [ECONOMIC ACTIVITY IS A WAR metaphora war] BoFA over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] \$47 billion of bonds formerly serviced by Countrywide.

BoFA has assembled [ECONOMIC ACTIVITY IS A WAR metaphora war] a vast [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] legal team to help with this “hand-to-hand combat” [ECONOMIC ACTIVITY IS A WAR metaphora war], as the bank's boss, Brian Moynihan, has described its tussles [ECONOMIC ACTIVITY IS A WAR metaphora war] with investors.

Five of the 12 Federal Home Loan Banks, industry-owned co-operatives that lend to mortgage banks, are also pressing [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force metaphora physical forces] claims against [EXTERNAL EVENTS ARE OPPOSING FORCES metaphora opposing forces]...the risk [ECONOMIC ACTIVITY IS A RISK metaphora risk] the big [PROPERTIES ARE PHYSICAL PROPERTIES - IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphora physical properties]

securitisers [ECONOMIC ACTIVITY IS WAR metaphora war].

Banks are under assault [ECONOMIC ACTIVITY IS FIGHTING A WAR Attacking Economic Entities is Attacking a Fortification metaphora fighting a war] from buyers of mortgage securities [ECONOMIC ACTIVITY IS WAR metaphora war]

Banks have made clear [IDEAS ARE PERCEPTIONS Communication is Showing metaphora perceptions] that they will fight back [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphora fighting a war].

A protracted [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Length metaphora physical properties] battle [ECONOMIC ACTIVITY IS A BATTLE metaphora war] suits [ECONOMIC ACTIVITIES ARE CLOTHES metaphora clothes] the banks: if they can spread [SOCIETY IS A BODY Bank is a Body metaphora body] the pain [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] over several years [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through], repurchases will continue to hack [ECONOMIC ACTIVITY IS A WAR metaphora war] at their profits but will not threaten [ECONOMIC ACTIVITY IS A WAR metaphora war] their solvency—not even that of the heavily [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Weight metaphora physical properties] exposed [ECONOMIC ACTIVITY IS A RISK metaphora risk] & [HARM IS BEING IN A HARMFUL LOCATION metaphora being in a harmful location] BofA.

Private MBS investors might be an even bigger [PROPERTIES ARE PHYSICAL PERPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphora physical properties] threat [ECONOMIC ACTIVITY IS A WAR metaphora war] to the banks.

An investigation by the 50 states' attorneys-general may result in [CAUSATION IS CONTROL OVER RELATIVE LOCATION- CAUSED CHANGE OF STATE IS CONTROL OVER AN ENTITY RELATIVE TO A LOCATION Causing a New State is Moving the Affected Party to a New Location metaphora control over relative location motion] a settlement [ECONOMIC ACTIVITY IS A WAR metaphora war] with banks—perhaps early next year—that could include pledges to reform [STATES ARE SHAPES Change of State is Change of Shape metaphora shapes] industry practices.

Some fund managers also worry that banks they sue will restrict their allocation of bonds in future offerings, while hedge funds fret that their prime [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphora precedence] brokers will close off [INVESTMENTS ARE CONTAINERS FOR MONEY containers for money] finance to them, says David Grais, a lawyer who works with aggrieved investors.

Most other estimates lie between \$50 billion and \$100 billion [LINER SCALES ARE PATHS metaphora paths].

Then there is the free-rider [INTERACTION BETWEEN PROGRESS AND EXTERNAL EVENTS AFFECTING PROGRESS IS INTERACTION BETWEEN TWO MOVING INDIVIDUALS Person and Vehicle metaphora interaction between two moving individuals] problem: the cost of litigation falls on [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on shoulder or back) metaphora possessions] those that sue, but the proceeds [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Progress is Forward Movement metaphora self-propelled motion] from putbacks flow [MONEY IS A LIQUID Gain of Money is Movement of a Liquid metaphora liquid] to all investors.

Congress recently held hearings on mortgage lenders' use of “robo-signers” [MACHINES ARE PEOPLE metaphora people] to stamp [MACHINES ARE PEOPLE metaphora people] eviction documents without bothering to read [MACHINES ARE PEOPLE metaphora people] them first [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphora precedence].

The American mortgage mess

Still, the fight [ECONOMIC ACTIVITY IS FIGHTING A WAR metaphora fighting a war] has already been sufficiently bruising [ECONOMIC ACTIVITY IS A WAR metaphora war] that some want out [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money: Goldman Sachs is said to be seeking buyers for its mortgage-servicing unit, Litton, which it acquired only three years ago [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

They have to do this if they breached assurances [ASSURANCES ARE CONTAINERS metaphora containers] about the quality of the mortgages in the pool [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money].

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Meanwhile, rising [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] food and energy prices could stress [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force metaphora forces] emerging [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)] markets and lead to export restrictions and other instability [FINANCIAL STABILITY IS MAINTAINING POSITION maintaining position / location metaphora motion].

This is one of the big [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphora physical properties] question markets for the year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through]; what will happen if oil hits [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] \$120 in 2011 [(BOUNDED) TIME IS A CONTAINER (bounded) metaphora container]?

Inflation in emerging [EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)] markets is producing a real appreciation [IDEAS ARE PRODUCTS metaphora products], even where nominal exchange rates [LINEAR SCALES ARE PATHS metaphora paths] aren't responding [COMMUNICATION IS LINGUISTIC COMMUNICATION – COMMUNICATION IS SPEECH metaphora linguistic communication] quickly enough.

Oil is currently over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphora physical properties] \$90 per barrel, and American petrol prices closed the year [(BOUNDED) TIME IS A CONTAINER (bounded) metaphora container] over [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphora physical properties] \$3 per gallon, an unusually high December level [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better is in a Static Situation is Being Above metaphora scale].

The nature of the recession [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] was such that a truly rapid recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] is likely out of [A PROBLEM IS AN OBJECT metaphora objects] the question, but unlike 2010, 2011 should bring [TIME IS A SOMETHING MOVING TOWARD YOU metaphora something moving toward you] a meaningful reduction [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in American unemployment [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION The Solution is Contained in the Problem metaphora locked container for its solution].

Unemployment remains [STATES ARE LOCATIONS metaphora location] very high [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in much of the developed world, including America.

Consumers in the big [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY

Amount is Size metaphora physical properties] emerging [EXISTENCE IS A LOCATION (HERE) / EXISTING IS BEING PRESENT HERE – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)] markets are gaining confidence [CHANGE IS GETTING (Object) Getting a Property is Getting a Possession metaphora getting (object)], and export industries in places like America are feeling stronger [ECONOMY IS A BODY – ECONOMIC FITNESS IS PHYSICAL FITNESS metaphora body].

America's recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] will accelerate.

To a significant extent, a strong [ECONOMY IS A BODY – ECONOMIC FITNESS IS PHYSICAL FITNESS metaphora body] American recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] has been delayed by America's failure [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL The Harm is an Obstacle metaphora preventing forward motion toward a goal] to believe in the inevitability of a strong [ECONOMY IS A BODY – ECONOMIC FITNESS IS PHYSICAL FITNESS metaphora body] American recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury].

Rebalancing ECONOMIC STABILITY IS BALANCE metaphora balance] will unfold [A PROBLEM IS A REGION IN A LANDSCAPE Solution is Object Buried in Landscape metaphora region in a landscape] over a period of years [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through], but America's non-petroleum trade balance [ECONOMIC STABILITY IS BALANCE metaphora balance] could actually balance [ECONOMIC STABILITY IS BALANCE metaphora balance] for a few months this year [TIME IS A LANDSCAPE WE MOVE THROUGH metaphora landscape we move through].

European crisis undermined [ECONOMIC ACTIVITIES ARE COMPETITIONS Economic Situation against Economic Development is Attacking Foundations metaphora competition] gathering [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Weight metaphora physical properties] momentum [ECONOMIC DEVELOPMENT ARE FORCES metaphora forces] in the spring, and falling [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] expectations lingered [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] into autumn [(BOUNDED) TIME IS A CONTAINER metaphora container].

And doubts about the sustainability [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphora location (here)] of emerging [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)] market recoveries [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] have risen [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] in recent months [(BOUNDED) TIME IS A CONTAINER (bounded) metaphora container].

Prices near [LINEAR SCALES ARE PATHS metaphora paths] \$4 per gallon contributed [CAUSATION IS CONTRIBUTION metaphora contribution] to the sharp [ECONOMIC CHANGES IS A CUTTING INSTRUMENT metaphora cutting instrument] economic slowdown [HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL metaphora preventing forward motion toward a goal] in 2008 [(BOUNDED) TIME IS A CONTAINER (bounded) metaphora container]; indeed, high [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PEROPERTY Amount is Verticality metaphora physical properties] oil prices have nearly [CHANGE IS MOTION (Location) metaphora motion (location)] always meant economic pain [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] for developed nations.

As global recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical

injury] continues [THE PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION metaphorA forward motion], we'll once more see [KNOWING IS SEEING Knowing What will Happen is Seeing metaphorA seeing] substantial increases [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] in the prices of many important commodities.

Commodity prices will rise [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties].

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The car industry's crisis is over [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorA self-propelled motion].

Yet the industry's problems are not behind [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE Being Better in a Dynamic Situation is Being Farther Along on a Path metaphorA scale] it.

Now, thanks to \$60 billion of federal finance and the cold shower [MONEY IS A LIQUID metaphorA liquid] of bankruptcy to wash away [MONEY IS A LIQUID metaphorA liquid] their debts, General Motors (GM) and Chrysler are still alive [COMPANIES ARE BEINGS WITH LIFE CYCLES metaphorA being with life cycles & FAILURE IS DEATH / SUCCESS IS LIFE metaphorA life], while Ford's canny [COMPANIES ARE PEOPLE metaphorA people] financial manoeuvring before the crisis allowed it to clean up [MORALITY IS CLEANLINESS metaphorA cleanliness & MORAL ACCOUNTING Moral Debt can be Paid Off with Punishment: The Society Taking Money from You metaphorA moral debt] its act and roar back [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphorA self-propelled motion] to record [MORALITY IS CLEANLINESS metaphorA cleanliness & MORAL ACCOUNTING Moral Account is Record of Transactions metaphorA moral] profits.

The car industry's crisis is over [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorA self-propelled motion].

The top-line [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorA scale] numbers coming out [LOGICAL RELATIONS ARE CAUSAL RELATIONS – LOGIC IS CAUSATION IS CONTROL OVER MOTION OF AN OBJECT RELATIVE TO AFFECTED PARTY Premises are the Source of the Conclusion metaphorA causal relations] of America are remarkably good.

One of them, Geely, has bought Sweden's Volvo, a brand with a small [AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorA physical properties] but faithful customer base in America.

Yet America's car companies are still under pressure [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force metaphorA physical forces].

The brutal [ECONOMIC DIFFICULTIES ARE ADVERSARIES metaphorA adversaries] downsizing [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] America's car companies have undergone [MEANS OF CHANGE IS PATH OVER WHICH MOTION OCCURS Means of Change of State is Path metaphorA paths] means that they have a chance [OPPORTUNITIES ARE OBJECTS metaphorA objects] of flourishing [COMPANIES ARE PLANTS metaphorA plants] in the lean [BAD IS DOWN metaphorA up] times ahead [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorA landscape we move through].

Eventually, Chinese cars will flood [PRODUCTS ARE LIQUID metaphorC liquid] into [COUNTRY IS A CONTAINER metaphorA container] American and European markets.

Then, bosses of American car companies wondered if their firms would survive [ECONOMIC DIFFICULTIES ARE ADVERSARIES metaphorA adversaries].

The American rescues [ECONOMIC DIFFICULTIES ARE ADVERSARIES metaphorA adversaries] averted catastrophe [ECONOMIC DIFFICULTY IS DISASTER metaphorA disaster], but they—along with continued European subsidies—have exacerbated the overcapacity that has dogged [PROBLEM IS A TANGLE metaphorA tangle] the sector for years.

The car giants [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Size metaphorA physical properties] can increase margins [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers] by, for instance, extending lean manufacturing processes to distribution and retailing so cars are made to order rather than stocked expensively along the distribution chain [ECONOMIC DEPARTMENTS ARE LINKED OBJECTS metaphorA linked objects].

The car industry can produce 94m cars a year, against [EXTERNAL EVENTS AFFECTING PROGRESS ARE FORCES AFFECTING FORWARD MOTION External Events Detrimental to Action are Opposing Forces metaphorA forces affecting forward motion] global demand of 64m. Unless that changes, it will never return to health [SOCIETY IS A BODY metaphorA body].

The car industry's crisis is over [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination – Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorA self-propelled motion].

It's happening because of high [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] fuel costs, environmental concerns and ageing populations: older people, with no children and less testosterone, shun [CHANGE IS MOTION (Location) metaphorA motion (Location)] big cars and powerful engines.

For carmakers, this shift [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction] is a problem, because small cars are less profitable than large ones.

During [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorA landscape we move through] the economic crisis, government scrappage schemes encouraged people to buy big expensive models [SHAPES ARE CONTAINERS metaphorA containers] on which carmakers enjoy fat [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorA physical properties] margins [INVESTMENTS ARE CONTAINERS FOR MONEY metaphorA containers]; but, now that those schemes have gone [CHANGE IS MOTION (Location) metaphorA motion (Location)], the shift towards [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction] smaller, more efficient cars has resumed [CHANGE IS MOTION (Location) metaphorA motion (Location)].

That should squeeze [MONEY IS A LIQUID metaphorC liquid] the domestic market further, hurt [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury] Western firms selling into China (including the luxury brands enjoying [COMPANIES ARE PEOPLE metaphorA people] a boom [ACTION IS SELF-PROPELLED MOTION Speed of Action is Speed of Motion metaphorA self-propelled motion], see article) and encourage Chinese manufacturers to look [COMPANIES ARE PEOPLE metaphorC people] abroad.

Sales may reach nearly [ACTION IS SELF-PROPELLED MOTION Progress is Measured in Distance to Destination or in Distance From Starting Point metaphorA self-propelled motion] 14m this year after plunging [BAD IS DOWN metaphorA up] to just over [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Being Better in a Static Situation is Being Above metaphorA scale] 10m two years ago.

running [ECONOMIES ARE MACHINES metaphorA machines] a current-account surplus—nonetheless gobbled up [GETTING IS EATING metaphorA eating] loads [INAPPROPRIATE ECONOMIC ACTIVITY IS GETTING A BURDEN metaphorA burden] of duff American asset-backed [OBLIGATIONS ARE POSSESSIONS Obligations are Burdens (on back) metaphorA possessions] securities by borrowing and thus leveraging [ECONOMIES ARE MACHINES metaphorA machines] up [MORE IS UP metaphorA up] its international balance [ECONOMIC STABILITY IS BALANCE metaphorA balance] sheet.

For one thing, Mr Bernanke seems to have modified his tune [INTERPERSONAL HARMONY IS MUSICAL HARMONY metaphorC musical harmony] about the “global savings glut [GETTING IS EATING metaphorC eating]” generated in Asia that supposedly kept American long-term [LONGTERM PURPOSEFUL CHANGE IS A JOURNEY metaphorA journey] interest rates unnaturally low [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] and helped to propagate [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Control ove Action is Control over motion metaphorC self-propelled motion] reckless [CAUSATION IS COMMERCIAL TRANSACTION metaphorA commercial transaction] mortgage lending.

One view [IDEAS ARE PERCEPTIONS metaphorAC perceptions] is that the imbalances [ECONOMIC STABILITY IS BALANCE metaphorC balance]—notably the big [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphorC physical properties] current-account surplus chalked up [CAUSATION IS WRITING metaphorC writing] by China and the huge [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] deficit in America—were part [CAUSATION IS AN OBJECT metaphorAC objects] of the madness [INAPPROPRIATE ECONOMIC ACTIVITY IS MADNESS metaphorA madness] of America's subprime lending boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties], and that a greater willingness on the part [CAUSATION IS AN OBJECT metaphorC objects] of surplus countries to allow [CAUSATION IS CONTROL OVER AN ENTITY metaphorC entities] their exchange rates [LINEAR SCALES ARE PATHS metaphorC paths] to rise [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] and to promote [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] more domestic demand is vital [EXISTENCE IS LIFE metaphorC life] now to sustain [FINANCIAL STABILITY IS MAINTAINING POSITION metaphorC maintaining position / location motion] a healthy [WORLD ECONOMY IS A BODY metaphorC body] global recovery [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphorC physical injury].

Imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] between surplus and deficit countries before the financial crisis [FINANCIAL CRISIS IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] were undesirable but that cannot absolve [OBLIGATIONS ARE POSSESSIONS metaphorAC possessions] the regulators and central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Impartance is Centrality metaphorAC physical properties] bankers in advanced [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE Being Better in a Dynamic Situation is Being Farther Along on a Path metaphorAC paths] countries from their responsibility for the mess [FINANCIAL CRISIS IS A MESS metaphorAC mess].

The world's central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Impartance is Centrality metaphorAC physical properties] bankers may have agreed to convene to discuss the matter but it didn't take long [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] for the sniping [WORDS ARE WEAPONS metaphorAC weapons] to begin

The world's central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers may have agreed to convene to discuss the matter but it didn't take long [TIME IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] for the sniping [WORDS ARE WEAPONS metaphorAC weapons] to begin Central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers on the catwalk [ECONOMIC CONFERENCE IS A FASHION SHOW metaphorAC fashion show] in Paris

PARIS, more used to staging fashion shows, put on a celebrity catwalk [ECONOMIC CONFERENCE IS A FASHION SHOW metaphorAC fashion show] of central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers today.

That theme goes to [A PROBLEM IS A REGION IN A LANDSCAPE Approaches to a Solution are Paths in Landscape metaphorAC region in a landscape] the heart [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties & ECONOMIC CRISIS IS A BODY metaphorAC body] of what went [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Negative Progress is Backward Movement metaphorAC self-propelled motion] wrong [INAPPROPRIATE ECONOMIC ACTIVITY IS A MISTAKE metaphorAC mistake] in the financial crisis and what should go [ACTION IS SELF-PROPELLED MOTION Purposeful Action is Directed Motion to a Destination - Progress is Forward Movement metaphorAC self-propelled motion] right [A PROBLEM IS A REGION IN A LANDSCAPE Trying to Solve a Problem is Looking for Solution in the Landscape metaphorAC region in a landscape] in its aftermath [ECONOMIC CRISIS IS WAR metaphorAC war].

Imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] between surplus and deficit countries before the financial crisis [FINANCIAL CRISIS IS A LANDSCAPE WE MOVE THROUGH metaphorAC landscape we move through] were undesirable but that cannot absolve [OBLIGATIONS ARE POSSESSIONS metaphorAC possessions] the regulators and central [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality metaphorAC physical properties] bankers in advanced [(EVALUATIVE) COMPARISON OF STATES IN A DYNAMIC SITUATION IS COMPARISON OF DISTANCE Being Better in a Dynamic Situation is Being Farther Along on a Path metaphorAC paths] countries from their responsibility for the mess [FINANCIAL CRISIS IS A MESS metaphorAC mess].

Another is that the banking crisis was caused by domestic excesses and aided and abetted by sloppy [ACTION IS SELF-PROPELLED MOTION Manner of Action is Manner of Motion metaphora self-propelled motion] supervision, and that there is little that can be done to alter [CHANGE OF STATE IS CHANGE OF DIRECTION metaphorA change of direction] current-account surpluses that stem [ACCOUNT SURPLUSES ARE PLANTS metaphorA plants] deep [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Depth metaphora physical properties] within economies [ECONOMY IS A CONTAINER (bounded) metaphora container].

Underpinning [THEORETICAL DEBATE IS COMPETITION Theories are Defensible Positions – Theories are Fortifications metaphorAC competition] this debate about imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] is a renewed [CHANGE IS RENEWAL metaphorAC renewal] focus on [IDEAS ARE PERCEPTIONS metaphorAC perceptions] the balance [ECONOMIC STABILITY IS BALANCE metaphorAC balance] of payments.

LOCKED CONTAINER FOR ITS SOLUTION metaphorAC container] divisions [(NON-EVALUATIVE) COMPARISON BETWEEN A AND B IS DETERMINED BY THE DISTANCE BETWEEN A AND B Difference Between is Distance Between metaphorAC scale], a sense of which can be gleaned [IDEAS ARE PLANTS metaphorAC plants] from a series of papers on imbalances [ECONOMIC STABILITY IS BALANCE metaphorAC balance] written by G20 central-bank [PROPERTIES ARE PHYSICAL PROPERTIES – IMPORTANCE IS A PHYSICAL PROPERTY Importance is Centrality a physical properties metaphorAC physical properties] governors at the request of the Bank of France*.

America's Ben Bernanke concedes [THEORETICAL DEBATE IS COMPETITION metaphorA competition] that domestic policies, including “unusually low [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties]” interest rates [LINER SCALES ARE PATHS metaphorA paths], fuelled [ECONOMY IS A MACHINE metaphorA machines] America's housing boom [PROPERTIES ARE PHYSICAL PROPERTIES – AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties]—but blames [RESPONSIBILITIES ARE POSSESSIONS Responsibilities Are Attached To Person / Things (Economic Activities here) Held Responsible metaphorA possessions] excess emerging [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION OUT OF CONTAINER metaphora location (here)]-market saving for the low [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphorC physical properties] rates [LINER SCALES ARE PATHS metaphorC paths].

Western governors put more stress [PSYCHOLOGICAL FORCES ARE PHYSICAL FORCES Influence is a Force metaphorA physical forces] on exchange rates [LINER SCALES ARE PATHS metaphorA paths].

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... as China's resilience [COUNTRIES ARE MACHINES metaphorC machines] was buttressed [EXISTENCE IS A LOCATION (HERE) – EXISTENCE IS LOCATION UP HERE Maintaining Existence is Maintaining Location Up Here metaphorC location (here)] by growth [ECONOMY ARE PLANTS Development of Economy is Growth of a Plant metaphorA plants] ... in America.

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America's ethanol subsidy is a particularly egregious offender [COUNTRIES ARE PEOPLE metaphora people].

Companies are sounding the alarm [ECONOMIC CRISIS IS ALARM metaphorAC alarm] and the G20 grouping of the world's largest [IMPORTANCE IS LARGER SIZE metaphorAC size] economies has put “food security [ECONOMIC ACTIVITY IS WAR metaphorAC war] ” top [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Better rank is higher on list metaphorAC scale] of its 2011 to-do list [EVALUATIVE COMPARISON OF A AND B IN A STATIC SITUATION IS DETERMINED BY THE VERTICAL DISTANCE BETWEEN A AND B Importance is Precedence metaphorAC scale].

Crisis prevention [CRISIS IS DIFFICULTY IS MOVING metaphorAC difficulty]

The main reasons for high prices [AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] are temporary [CAUSAL PRECEDENCE IS TEMPORAL PRECEDENCE metaphora temporal precedence]: ...

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Rather, it was to build [TRUST IS A BUILDING metaphorA buildings] trust between people who had never met.

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Companies like Mango will not be able to [COMPANIES ARE PEOPLE metaphora people] plug every gap [MARKETS ARE CONTAINERS metaphora containers]. Mortgage lending for America's 11m illegal immigrants is a market that has gone into reverse [CHANGE OF ECONOMIC STATE IS CHANGE OF DIRECTION metaphora change of direction].

To recoup [CHANGE IS GETTING/LOSING Regaining a Property is Regaining a Possession metaphora getting] some of their losses, Bank of America, Wells Fargo, Citibank and JPMorgan Chase are all planning [BANKS ARE PEOPLE metaphora people] to stop offering free basic [ECONOMY IS COMPETITION Accounts are Fortifications - Basic Amount of Accounts are Foundations metaphora competition] checking accounts.

But legislation to protect [ECONOMIC ACTIVITY IS WAR metaphora war] consumers from rapacious [LUSTFUL PERSON IS AN ANIMAL] bankers has had unintended consequences, too.

The Dodd-Frank act [ECONOMIC RULES ARE PEOPLE metaphora people] restricted credit-card penalties and overdraft fees, and proposed a cap [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] on the amount banks can charge [BANKS ARE PEOPLE metaphora people] retailers for debit-card transactions.

But since the downturn [BAD IS DOWN metaphora up & CHANGE OF ECONOMIC STATE IS CHANGE OF DIRECTION metaphora change of direction] most banks have backed off [CHANGE OF ECONOMIC STATE IS CHANGE OF DIRECTION metaphora change of direction] these portfolios, thanks partly to overheated [INTENSE POLITICAL MOOD ARE HEAT metaphora heat] political rhetoric [WORDS ARE WEAPONS metaphora weapons] on immigration.

The crisis has throttled [HARM IS PHYSICAL INJURY Economic harm is physical injury metaphora physical injury] people's access [A PROBLEM IS A LOCKED CONTAINER FOR ITS SOLUTION locked metaphora container for its solution] to finance, by making [ACTION IS SELF-PROPELLED MOTION Control over Action is Control over Motion metaphora self-propelled motion] banks more careful [BANKS ARE PEOPLE metaphora people] and by harming [HARMING IS LOWERING metaphora up] credit scores [GAINING CREDIT IS A COMPETITION - GAINING CREDIT IS A GAME metaphora competition].

Firms are much less squeamish [COMPANY IS A BODY metaphora body] about the wider [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Size metaphora physical properties] pool [INVESTMENTS ARE CONTAINERS FOR MONEY metaphora containers for money] of unbanked customers, however.

THE storefront for Mango Financial, a young [COMPANIES ARE PEOPLE metaphora people] Texan company, was designed by one of Austin's most fashionable [COMPANIES ARE PEOPLE metaphora people] architecture firms.

Mango is not the only one [COMPANIES ARE PEOPLE metaphora people] that sees [IDEAS ARE PERCEPTIONS metaphora perceptions] a juicy [ECONOMIC MARKETS ARE FOOD metaphora food] market.

Mortgage lending for America's 11m illegal immigrants is a market that has gone into reverse [CHANGE OF ECONOMIC STATE IS CHANGE OF DIRECTION metaphora change of direction].

Mango is aiming at [MARKET IS A TARGET metaphora target] an unglamorous [BENEFICIAL MARKET IS MAGIC metaphora magic] market, the unbanked.

Its savings accounts offer [COMPANIES ARE PEOPLE metaphora people] a decent [GOOD IS UP metaphora up] 5% interest rate, but only on balances up to [PROPERTIES ARE PHYSICAL PERPERTIES - AMOUNT IS A PHYSICAL PROPERTY Amount is Verticality metaphora physical properties] \$5,000.