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A Cognitive Analysis on Conceptual Metaphor in English

Economic Discourse

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Abstract

As one of the major theories in cognitive linguistics, conceptual metaphor has received lots of attention from scholars at home and abroad since it was first brought up. Metaphor is a cross-domain mapping from one concrete conceptual domain to another. Cognitive linguists recognize that metaphor converts complex and abstract concepts into intuitive and specific concepts, which is conducive to the understanding of abstract concepts and conducting abstract thinking. This is also why conceptual metaphor was widely used in economic discourse utilizing familiar concepts to help people comprehend abstract and obscure economic concepts. Based on the related theories of cognitive linguistics, taking economic passages about Chinese economy and business activities in The Economist as an example, this paper aims to find out and analyze some representative conceptual metaphors describing Chinese economy in economic discourse by the methods of quantitative and qualitative analysis with the hope to help ESP learners with their learning of economic discourse.

Keywords

conceptual metaphor, economic discourse, Chinese economy, The Economist

1. Introduction

In recent years, the study of metaphor has enjoyed a great deal of interest in academic filed. Cognitive linguists claim that conceptual metaphor is not only a linguistic phenomenon but also a tool of thinking, which is ubiquitous in our daily life. Lakoff and Johnson (1980) argue that conceptual metaphor is a cross-domain mapping based on image schema mapping from a source domain (unfamiliar and abstract concepts) to a target domain (familiar and understandable concepts). Far from being considered a mere rhetorical or poetic device, conceptual metaphor has now been shown to play a fundamental role in

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human language and cognition. Therefore, it is not surprising to find conceptual metaphor was widely used in economic discourse.

The American linguist McCloskey (1990, pp. 199-248) first explored metaphors used in economics and science field and had a series of related writings. Economic scholars also often use metaphors when they are using facts, logic and examples to prove or explain things. For example, Adam Smith (1997) in his economics monograph *Wealth of Nation* used the famous metaphor "invisible hand" to describe the unknown power that economy has on controlling the division of capital. Moreover, metaphors like "economic lever" "human capital" and so on are all metaphors in economics that have been quoted for a long time. In economic discourse, there are many abstract economic concepts and ideas which will increase difficulties for learners to understand, so to analyze and comprehend metaphors used in economic discourse to simplify the understanding can be a good way to help learners' better understanding of these abstract economic concepts. Based on theories of conceptual metaphor, by applying the methods of both quantitative and qualitative analysis, this paper aims to find out the representative economic metaphors describing Chinese economy and business activities in some economic passages published in *The Economics*. Then these representative metaphors will be analyzed in detail with lots of examples extracted from those passages trying to give some insights on ESP learners when reading English economic discourse.

2. Literature Review

In classical theories of language, metaphor was seen as a matter of language not thought. Metaphorical expressions were assumed to be mutually exclusive with the realm of ordinary everyday language: everyday language had no metaphor, and metaphor used mechanisms outside the realm of everyday conventional language. The classical theory was taken so much for granted over the centuries that many people didn't realize that it was just a theory. But with the development of cognitive linguistics as a field of research, the theories of metaphor got deeper research, in particularly the conceptual metaphor theory, proposed by Lakoff and Johnson in their book Metaphors We Live By (Lakoff & Johnson, 1980) and with the following development, they state that metaphor is pervasive in everyday life, not just in language but in thought and action and our ordinary conceptual system, in terms of which we both think and act is fundamentally metaphorical in nature. According to Lakoff and Johnson, people construe abstract concepts by relating them to the concepts that we are already familiar with in our experience of the world. For example, we cognitively relate the abstract concept of the emotion "anger" - the target domain - to our experience of a hot fluid in a container - the source domain, leading to the conceptual metaphor ANGER IS A HOT FLUID IN A CONTAINER. The typology of conceptual metaphor proposed by them from a cognitive perspective includes structural metaphor, ontological metaphor and orientational metaphor. This division is made based on the assumption that people use specific tangible entities in life or well-known concepts, or through image schema and categorization process to understand abstract, and ambiguous concepts (Wu, 2011). According to the

researches and studies of these scholars and linguists, it is concluded that conceptual metaphor is a matter of thinking which is universe in our daily life. It is a conceptual tool connecting abstract concepts with specific concepts.

Abstract concepts and expressions in economic discourse can cause obstacles to readers, affecting their digestion and absorption of information. Economic activities such as production, distribution, consumption and exchange have abstract nature, very far from the actual life of people. In order to enable people to understand these concepts, the authors of economic discourse often use a lot of conceptual metaphors, projecting strange cognitive domain to familiar cognitive domain, expanding the use of language and enhancing expressiveness which helps people to understand economic principles and their functioning. For example, by projecting well-known kinship relationship to unfamiliar economic concepts, we have the expressions like "parent company", "son company" and "sister company" to help readers better understand the different types of companies. Metaphor in economic discourse has attracted many scholars at home and abroad. Henderson (1982) is considered the first expert to begin study metaphor in economic discourse. McCloskey (1983) pointed out that metaphor is often used in economic discourse. Her article put forward the idea that economic discourse is essentially metaphorical. White (2003) explored "growth" in economic discourse and found that expressions matched with "growth" were highly metaphorical. Hu and Xu (2017) took comparable articles in the 2014 The Economist and China Economic Weekly as database to analyze the universality and variability of "Economic Metaphor" of Chinese and English. The analysis revealed the universality of economic metaphors and the tendency of both Chinese and English to use metaphors of people, plants, entities and machines. Huang (2011) analyzed the concept metaphors in the government work report from 1978 to 2011 by the method of diachronic research. The analysis showed that architectural metaphors, journeys and roads metaphor, machine metaphor are the main types of economic metaphor. Fu (2013) summed up eleven aspects of metaphor mapping in business English media language by collecting corpus of English articles in Biz China section of "China Daily".

Based on the researches from both foreign and domestic scholars, it can be seen that there are mainly two characteristics in current research in metaphor in economic discourse. The first one is that most of the researches are based on corpus. The second one is that many studies in this field are comparison analysis, comparing economic metaphor in discourse of two different languages. These two features are of course delectable because analyses based on corpus are more reliable. And comparison analysis is a good way to get implications of the difference of using metaphors in different languages. However, there is very limited research conducted on specific economic expressions or on economic metaphor describing a specific country in the current researches of this field, which means most of the researches now are kind of general in content and this is what needs more research and studies in the future.

3. Research Method

This study intends to adopt both quantitative and qualitative methods to search, identify, classify and analyze the economic metaphors in economic discourse. In this study, a total of 15 articles about the economic development and business activities of China published by the special column "China" "Business" and "Finance and Economics" section in *The Economist* from January to December in 2017 were collected. The Economist is positioned for social elite with high income, independent opinions and critical spirit. The Economist focuses primarily on political and commercial news of international countries. The main readers of *The Economist* are senior intellectuals as well as students who study for postgraduate or doctor degree. Among undergraduates, more and more students are beginning to pay attention to this newspaper. The magazine thinks their readers are highly educated, so many economic terms and jargons such as "invisible hand", "micro-economic theory" are not explained. The Economist opened the China column on January 28, 2012, which is used to reflect China's unique development model and mainly reports on China's political, economic and financial conditions. It is an important window and an information port for observing and understanding China's political and economic developments. Considering the large group of readers as well as its popularity and influence in China, this paper chose some articles in the Economics as a database to analyze economic metaphor. At the same time, with the cross-domain mapping mentioned above as the standard, the selected articles are analyzed sentence by sentence to find out all the conceptual metaphors in these articles describing China's economic development.

4. Data Analysis and Discussion

4.1 The Four Major Economic Metaphors

Having done a great amount of work, 96 economic metaphors from 15 articles on China's economic development and business activities were finally found out. In view of the reliability of data, in the classification process, metaphors whose occurrence is less than 10 are excluded. Altogether 12 metaphors were excluded, leaving 72 effective metaphors. Through the classification of obtained metaphors in terms of mapping domain, ultimately four representative economic metaphors were finally induced. According to the total number of occurrences of these four metaphors, they are ordered as follows: living organism> up-down> vehicle> game. Detailed data is shown in Table 1.

Table 1. Occurrence of Four Representative Economic Metaphors

Economic metaphor	Occurrences	Frequency
Living organism	26	29%
Up-down	17	20%
Vehicle	16	19%
Game	13	15%

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4.2 Living Organism Metaphor

From table 1, it is clear that the target domain "living organism" is the most frequently used metaphor in English economic discourse to describe Chinese economy. Economy is abstract which is invisible and unperceivable. But living organism like human beings is what we are mostly familiar with in real world. There are several stages during a living organism's life like birth, growth and death, which is much similar to the development of economic and business conditions. Therefore, in order to help readers better comprehend some abstract and complex economic concepts, in most cases economy is liken to living organisms like human beings and plants. Expressions like "revive" "breathe" "uproot" which are literally used on animals or plants were widely used in English economic discourse to describe economic activities. Human beings and plants may be ill and need help to stay healthy. Good or bad economic conditions can be represented through the conceptual domain of human being's health conditions. Therefore, expressions such as "recover" "healthy" are commonly used to describe Chinese economic conditions. Here are some examples:

- 1) Whether in the **breathless** years of day's more languid era, one constant in China has been the poor state of workers' rights and the frequent outbreaks of labour unrest.
- 2) Private investors in China **shy** away from Russia for the same reasons that their Western counterparts do: the lack of a robust legal system and clearly defined property rights.
- 3) Li Keqiang, the premier, said that economic reforms would be "like taking a knife to one's **flesh**".
- 4) Mr Li's job is simply to ensure that the chrysalis stays healthy. Mr Xi and the party congress in a few months' time will have much more say over how to transform the pupa into a **butterfly**.
- 5) And for those who doubt those data, two other indicators—price and profit—show that Chinese heavy industry is much **healthier** than just a short while ago.
- 6) Proponents argue that the rebound in industrial profits has allowed companies to repair damage balance-sheets, and that the cuts in capacity are laying the groundwork for an eventual **recovery** in investment in production facilities.

4.3 Up-down Metaphor

Based on the data collected in this study, up-down metaphor occupies a relatively higher rank. This kind of metaphor belongs to orientational metaphor categorized by Lakoff and Johnson, which are metaphors using orientational concepts like up-down, before- behind, in-out, deep-superficial, center-peripheral to express another conceptual domain. In economic discourse, a series of metaphoric expressions using orientational lexis to describe economic activities are formed through conceptual mapping. Among them, the metaphor of up-down was most widely used. It specifies and visualizes economic development and its relationship between quantity and quality by describing their location as an object in space (Fu, 2013). When economy becomes better, it is represented through "more" in quantity and "up" in tendency such as "up, rise, soar, ascend, climb" On the contrary, when economic

condition gets worse, it is represented by words like "down" "drop" "fall" "sink" "slide". In the current study, these conceptual expressions usually occur with other verbs such as "nudge", "pare", "ramp" to express the economic conditions of China. Here are some examples in these articles:

- 1) Many Chinese steel mills and coalmines (especially small privately-owned ones) **ramped up** output in the months before the curbs went into effect and did the same again when controls were eased.
- 2) By nudging up money-market rates, it wants to push lenders and investors to **pare back** their borrowing.
- 3) He did not even raise the idea of levying a property tax, which officials have previously touted as a possible way of **patching up** local budgets (such taxes would be bound to anger middle-class Chinese).
- 4) In the coal industry, officials are struggling to find the right balance, aiming to restrain prices after their initial efforts **drove them up.**
- 5) Its bilingual sales staff can arrange for a purchase to be posted to China as soon as it has been **rung up.**

4.4 Vehicle Metaphor

Vehicle is so common in modern society that almost everyone in China is quite familiar with it. Many qualities possessed by vehicles are quite similar to economic development. For example, vehicles need fuel to move, while in the case of economic development, it needs input like capital or technology to operate. Vehicles make noises when the brakes are stamped suddenly, while in the case of economy, it also makes unfavorable outcomes when it is suddenly made to stop growing. Using the conceptual domain of vehicle to describe Chinese economy can help readers of *The Economics* better understand the abstract concepts of Chinese economy. Expressions like "zooming ahead" "fore ahead" conveyed vividly the message that Chinese economy is making progress like vehicles.

- 1) But Mr. Li was candid about dangers that still lurk after a decade of debt-fuelled growth.
- 2) Foreign competitors see China as a **well-oiled** machine and worry that they will lose business not just in China but around the world.
- 3) "It's like a car **fishtailing**," says Laban Yu of Jefferies, an investment bank. After skidding a bit, a driver with some luck and skill can get his **vehicle** straight again.
- 4) Analysts wondered whether the companies' global shopping spree would screech to a halt.

4.5 Game Metaphor

In our daily life, there are all kinds of games such as sports games and art games etc. so we are quite familiar with them. Game is an activity where two or more participants cooperate or compete with each other to reach the target. In a game, on the one hand, participants need to compete with each to win the game. On the other hand, they sometimes need to cooperate with partners to win the game. In different kinds of games, competition and cooperation may play a different role. In the current research, in the articles of *The Economics*, Chinese economy and Chinese business are often described as participants in a domestic or international game. Metaphorical expressions like "beat" "ally" "take the lead" are commonly seen in the researched articles to describe Chinese economic conditions and business

operations. It is helpful for readers to understand Chinese economy through the concept of game which is obviously more specific and easier to comprehend. The following are some representative examples:

- 1. Chi-Med's Fruquintinib may even be beaten in the race to approval in America and Japan by a cancer drug called Epidaza from Chipscreen Biosciences of Shenzhe online, too, the private sector has **taken the lead**.
- 2. How OPPO and Vivo are **beating** Apple, Xiaomi and the gang
- 3. Governments, after all, have a lousy record in picking winners in fast evolving markets.
- 4. To manufacture in China, foreign firms must take local **partners**.
- 5. Some resisted at first, but eventually the lure of China's vast market **won them over**, especially when they saw competitors getting a slice of it.

4.6 Other Metaphors

In the current research, in addition to the above four representative metaphors, there are also some other conceptual metaphors used in these English economic discourse in spite of the fact they did not occur as frequent as those four representative ones in the researched discourse. The mapping domains of these conceptual metaphors are "journey" "container" and "building" These concepts are also familiar things in daily life and carry much similarities with economic development and business activities. Taking the mapping domain "journey" as an example, we know that economic development can be divided into several stages and also has its own goal to reach, which are quite similar to the qualities that a journey has like "path" and "destination". Considering these similarities, it is common to see metaphoric expressions like "on the way to" "on the path to" to describe Chinese economy. Here are some examples:

- 6. If the drug is approved both in China and in Western markets it could be the very first prescription drug to be designed and developed entirely in China that will be **on a path to** global commercialization.
- 7. Investment by private companies last year increased at its slowest **pace** in more than a decade
- 8. It **sucked in** more than half the world's exports of scrap copper and waste paper in 2016, and half of its used plastic
- 9. China wants to **build** a "high-speed rail economy"

4.7 Summary

Generally speaking, the mapping domains of these four representative metaphors are all concepts that are very familiar to people and are highly related to humans' real life. This finding supports the idea that metaphor transfers abstract idea into intuitive and concrete concepts, which is conductive for people to understanding abstract concept and obtaining the conclusion of abstract thinking. At the same time, people live in a similar environment and the real environment determines that people are bound to adopt many similar things when using metaphor to construe the world.

Moreover, from the data above, it can be seen that conceptual metaphor is universal in English economic discourse which also proves the idea of cognitive linguists about university of conceptual

metaphor in language. Therefore, it is advisable that ESP students build their awareness of conceptual metaphor and strengthen their ability to understand metaphors in economic discourse. In addition, "Living organism metaphor" is the most frequent one used to describe Chinese economic development conditions in this study. This ranking shows that learners need to pay more attention to the analysis and comprehension of this kind of economic metaphor when they are reading economic discourse about Chinese economy.

5. Conclusion

This paper uses a lot of examples from English economic discourse in *the Economics* to prove that conceptual metaphor is widely used by economists and authors in economic discourse by using familiar, tangible, concrete concepts to represent strange, invisible and abstract concept, which is easy to recognize and understand. In addition, "living organism " "up-down" "vehicle" and "game" " are the four major conceptual metaphors used in English economic discourse describing Chinese economic conditions and business activities. The current research on conceptual metaphor in economic discourse is helpful for English for Specific Purposes (ESP) learners since Business English major students by equipping themselves with knowledge about conceptual metaphor can better understand abstract concepts, and develop professional vocabulary and cultivate genre awareness. Therefore, the practical significance of this paper lies in appealing to teachers in Business English teaching to attach more importance to the teaching of conceptual metaphor in economic discourse and to make efforts to strengthen students' competence in understanding conceptual metaphors.

In spite of the theoretic and practical significance this paper on the ESP teaching and learning, there is much room for further improvement. The biggest problem is that the data collected in this study is quite limited. The current research only collected fifteen articles from one English economic magazine, so the quantity of the data is far from enough to give a reliable and comprehensive research result. Besides, this paper analyzed the data collected based on the author's own understanding, which means some analyses in this paper may be subjective and is not thorough enough.

Further research in this field could be extended to the analysis of metaphor in a specific type of economic discourse (like professional), or to the exploration of a specific metaphorical expression (like "economy is a living organism") used in economic discourse. Another interesting direction could be an investigation of conceptualization of a specific stage of economic development, like economic recession.

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