

# A Contrastive Study of English and Chinese Metaphoric Cognition of Visceral Organs — A Case Study of “Heart”

Xiyan Zhu<sup>1</sup>

<sup>1</sup> School of Foreign Languages, Guangdong Polytechnic Normal University, China

Correspondence: Xiyan Zhu, School of Foreign Languages, Guangdong Polytechnic Normal University, China.

doi:10.56397/SSSH.2023.08.04

## Abstract

Metaphor is not only a linguistic phenomenon but also a way through which the humans see the world. Metaphor can be seen everywhere in our daily life, serving as a bridge that leads people to the understanding of complex things. “Heart” is one of the most important visceral organs in the human body, with diverse metaphorical implication. This essay will take “heart” as an example for the contrastive study of Chinese and English metaphorical cognition of human visceral organs as heart is the most influential visceral organ and it is the most complex for cognition. The study will pay an emphasis on the aspects shared by the two languages and also the differences between them, in order to improve people’s understanding of human body metaphor.

**Keywords:** metaphor, human visceral organs, cognition, heart

## 1. Introduction

### 1.1 Background

Generally speaking, humans tend to study and know the outer world from understanding something near and then something far or from something familiar to something more complex. Lakoff & Johnson (1999: 147) have said that concept is formed from the body and the brain’s experience of the outside world, only by which the concepts can be understood. Therefore, we can say that concept is the product of human’s experience. To be more specific, humans experience the world in a special way based on their physiological structure. Concepts and meanings are a kind of mental phenomenon based on physical experiences. Concepts are the outcomes of human bodies’ interactions with the objective world and they are settled down through the experiences (Wang Yin, 2002: 83-84). Since human body is closely related to the relationships among people, human body plays a basic role in people’s understandings of the world. It is human’s experiences of the world that help construct the concepts by which people understand the world thoroughly.

During the process of understanding the world, one of the most important methods which humans use is metaphor. Throughout the history, metaphor had played a significant role in people’s daily life. People usually consider metaphor only as a rhetorical device. In 1980, Lakoff & Johnson wrote in their book *The Metaphor We Live By* that metaphor is not only a way of polishing the language but also a forceful tool with which humans acquire the knowledge of abstract and complex concepts and it is generally the cognitive method and thinking way of human beings. According to the research, many similar if not exactly the same body metaphors are used both in Chinese and in English. Their similarities reveal that both English and Chinese metaphors are originated from the body experience, having the common mental and physical basis. However, there are also many great contrasts between English and Chinese in expressing metaphors. Although many studies concerning body metaphor have been done, these analyses focus on the human body parts such as hand, head, foot, eyes and so on rather than the visceral organs such as heart, stomach, gall, guts, liver, spleen and so on. As we all know, heart is one of the most important visceral organs in human body and it is often used in metaphor both in Chinese and in

English. Thus, this study chose “heart” as a focus to discuss about the similarities and differences between Chinese and English body metaphors concerning the visceral organs.

### *1.2 Purpose and Significance of the Study*

As for the purpose, the present study aims at answering the following questions:

- (1) Do English and Chinese body metaphors concerning “heart” have some similarities or differences?
- (2) How are they similar to or different from each other?
- (3) What are the causes that can account for these similarities and difference?

As for the significance, firstly, this study can find some similarities and differences between Chinese and English languages through these metaphorical uses; secondly, it will contribute to the study of the body metaphor from the cognitive approach and cognitive linguistic theory; thirdly, the present study can also provide some suggestions for rhetoric teaching both in English and Chinese.

## **2. Literature Review**

### *2.1 Cognitive Approach to Metaphor*

Metaphor was studied by using a cognitive approach and was brought into the scope of linguistics firstly by Lakoff and Johnson in 1980 (Zhao Yanfang, 2001: 26). Lakoff and Johnson’s views on metaphor are influential nowadays and play a significant role in the study of metaphor. They said that “metaphor is pervasive in everyday life, not just in language but in thought and action.” (Lakoff & Johnson, 1980: 3)

In cognitive linguistics, metaphor is regarded as an important cognitive instrument, which is first explored by George Lakoff and Mark Johnson (1980) in *Metaphors We Live By*. They developed this theory into Conceptual Metaphor Theory, by which metaphors are a matter of cognition as opposed to language, and are fundamental to conceptualizing the world. Metaphor consists of two domains and they are target domain and source domain. There is a mapping from source domain to target domain, formally from the concrete to the more abstract. A conceptual domain is any coherent organization of experience and a mapping is the systematic set of correspondences that exist between constituent elements of the source and the target domain.

According to Lakoff and Johnson (1980), conceptual metaphors may be divided into three categories: structural metaphor, orientational metaphor and ontological metaphor.

Human beings recognize the world through their bodies. Human body is the tool for us to contact with the world. Human beings use their bodies to perceive, imagine and express the entities in the outside world. In other words, human body and his organs are the bases of human cognition. Body metaphorical cognition means regarding conceptual domain drawn from human cognition of their own bodies as the source domain to project onto unfamiliar and abstract things (target domain) so as to understand things. In primitive human language, abstract words are rare, so it is inevitable that they should use terms for body parts and tissues to present abstract things.

### *2.2 Previous Studies of Body Metaphor in English and Chinese*

Many scholars have studied body metaphor adopting cognitive approaches. Some of them studied body metaphor in Chinese, such as Li Wenli (2007), who made a systematic research on the metaphor of human body in Chinese; Huang Feng (2006) who made a cognitive study on human body metaphor both from English and Chinese aspect.

Some of them studied the comparison of body metaphor between Chinese and English, such as: Zhang Xinxin (2006), Tang Yawei (2005) and Tian Xu (2005). They presented the working mechanisms, features and mapping models of body metaphor from the cognitive approach with a great many Chinese and English examples. Some similarities have also been included in the discussion.

Some of them studied the cognitive body metaphor from the perspective of polysemy, for example: Li Chunlin (2004) who made a comprehensive study of conceptualization of polysemy category: taking EYE as a case study.

The similarity of their studies is that most of them studied the body metaphor from all kinds of body words, such as head, face, leg, nose, ear, etc.

## **3. Theoretical Framework**

The process of body metaphorization is that human beings use concepts of body parts that are formed during man’s recognizing his body to help them recognize other unfamiliar, abstract objects in order to know more about the world. Their formations are inevitable results of the interaction between cognitive thinking and physical activities of human beings. Metaphoric senses of human body words are constructed through metaphoric mappings based on similarities. Body Metaphor is the most primitive metaphor. It is the most general thinking pattern of human beings for perceiving and describing the world.

According to Zhang Xinxin (2006), body metaphors are classified into four types: (1) mapping from body domain to non-body domain; (2) mapping from non-body domain to body domain; (3) mapping with human body domain; (4) mapping from relationship between different body parts to relationship between things or persons. The detailed description will be given below.

### 3.1 Mapping from Body Domain to Non-Body Domain

People use their body parts to experience the world and express things at the very beginning. Both in Chinese and in English, the non-body domains can be further classified into concrete and abstract domains.

#### 3.1.1 Mapping from Body Domain to Concrete Non-Body Domain

Mapping from body domain to concrete non-body domain is usually based on the direct and basic similarity between two concepts. The similarity is usually in position, shape, or structure and function between the source domain and the target domain.

**Similarity in Position:** Take the metaphor *the head of a mountain* for example, the source domain is human body “head” and target domain is mountain. Since head is on the top of human body so it is natural for people to use head to refer to the top of a mountain. Thus, the attribute of head is mapped onto the top part of the mountain and the similarity in position prompts the mapping.

**Similarity in Shape or Structure:** Take the metaphor *the face of a watch* for example, the source domain is human body “face” and target domain is watch. Since the shape of face is usually round or square, similar to the cover of a watch. Other examples in English and Chinese are: *the hand of a watch*, *the head of an arrow*, *the eye of a needle*; 湖心, 街头, 泉眼, etc.

**Similarity in Function:** Each part the human body or every organ has its own biological function, such as seeing, hearing, speaking, digesting, etc. Human beings themselves are quite familiar with different functions of each body part. They mapped the function of a body part onto that of another outside entity. For example, we have *hands of a watch*, since we can move our hands freely and point out the directions.

#### 3.1.2 Mapping from Body Domain to Abstract Non-Body Domain

With the development of cognitive capacity, people’s cognition extended to something abstract. Human beings mapped the attributes of body parts onto abstract things based on both physical and psychological similarities. This kind of mapping can be rather complex and it can be divided into various domains such as abstract object domains, emotion domain, action domain, etc.

**To Abstract Object Domain:** In this kind of mapping, the source domain is human body, and the target domain is abstract entities. For instance, in the expression *the heart of a matter*, the source domain is human body part — heart, and the target domain is an abstract entity — matter. Generally speaking, heart is referred to the key part of some abstract entities such as a matter, a problem, and a city, etc. In Chinese, there are also some examples, like 交通动脉, 祖国的心脏, etc.

**To Emotion Domain:** Human body is the physical basis for human feelings. People tend to use body parts to express their emotions. The mapping is based on bodily experience. Take “head” for example, people usually hold up their heads for happiness, joy and arrogance, and usually hang down their heads for sadness. Therefore, we have such body metaphors: *hold ones’ head high*, 垂头丧气, etc.

**To Action Domain:** Sometimes, the English people use their body parts to express abstract action concept. In this kind of mapping, the human body word is usually used as a verb. For example, we have the expression *to shoulder ones’ bag* since “shoulder” means carrying something. Hence shoulder is mapped onto the action domain.

### 3.2 Mapping from Non-Body Domain to Body Domain

Mapping from non-body domain to body domain is another type of mapping, by which people can understand some relative concepts deeply. This is a higher cognitive form.

**From Color Domain to Body Domain:** When color terms are associated with human body words, color terms are used metaphorically. Both in English and Chinese, there are color terms, but the connotation of colors is different. Some are easily understood since they have the same metaphorical meanings in different cultures. For example, *black heart*/黑心 describes an wicked person in both English and Chinese. *Black* is a color that makes people think of the darkness and bad luck, so people often use it to modify something negative. Here, black is associated with evil. In English, there is also a color term called *green-eyed*, which means jealousy. While in Chinese, an expression often used to describe the same feeling is 眼红 or 害了红眼病.

**From Temperature Domain to Body Domain:** The temperature domain is mapped onto the body domain to express attitude and emotion such as: 他有一副热心肠, 我的心一下子凉了半截; You should not turn a cold shoulder to your family member, nor should you give your friends the cold shoulder.

**From Hardness Domain to Body Domain:** The hardness domain is also mapped onto the body domain to express the firm attitude such as: 他铁石心肠, 她耳根子很软; He is an *iron-hearted/stone-hearted* person.

### 3.3 Mapping Within Human Body Domain

In Chinese, there are some expressions like 额头、鼻头、手背、心眼、耳目. This type of mapping is also based on the similarities in shape, position and function. It is a mapping between two body parts. For example, 心眼 is a metaphor in Chinese, which refers to intelligence and cleverness. This is an abstract concept.

### 3.4 Mapping from Relationship Between Different Body Parts to Relationship Between Things or Persons

Different from the previously discussed mapping models, there is also another mapping model that exists only in Chinese and it is the mapping from relationship between different body parts to relationship between things or persons.

In this type of mapping, the source domain is the relationship between body parts and the target domain is the relationship between things or persons. The mapping is based on the similarity in relationship.

For example, lips and teeth are coexistent. If lips are damaged, the teeth will be exposed to wind. 唇亡齿寒 means if one of two interdependent things falls, the other is in danger.

## 4. Metaphorical Uses of “Heart” in Chinese and English

Heart is one of the most important visceral organs in the human body. People often relate heart to thinking and mental activities although it is physiologically wrong. Based on the mapping models mentioned above, the metaphorical uses of “heart” in Chinese and English will be discussed as follow.

### 4.1 Mapping from Non-Body Domain to Heart

There are many other domains like spatial domain, color domain, quantity domain, material domain and weather domain, etc. which can be mapped onto the body part *heart*.

#### 4.1.1 Mapping from Spatial Domain to Heart

Space has three dimensions: height, width and length. If space is mapped onto heart, human heart will have the three dimensions as well.

(1) Height is a three-dimensional space of an object. If heart is mapped onto another domain by height, it will have its height inside and outside the position, and it is like a container that can be opened and closed or be full and empty. Hence, we have such expressions like 心中, 心里, 心内/ in the heart, in ones' inner heart, in ones' heart of hearts, heart goes out to somebody, from the bottom of heart; open ones' heart to somebody; 开心, 关心, 敞开心扉, 心满意足, 心里空荡荡的, etc.

His heart was in his mouth as he watched the firemen trying to reach the child on the roof of the burning building.

Can you find it in your heart to forgive me?

My heart goes out to men who have to work outside in this cold weather.

She thanked him from the bottom of her heart for all his help.

John felt much better after he opened his heart to Betty.

This good news filled my heart with joy.

这种寂静能让我们逐渐倒空内心的烦恼。

他的心里充满了感激之情。

她很关心炮长的情况, 却又无法打听, 也不能随便打听。 — 《红岩》

高团长平日那样心高志大, 怎么就服他们的管辖? — 《风云初记》

(2) Width is a two-dimensional space of an object. If heart is mapped onto another domain by width, it will have its width. Therefore, there are such expressions as have one's heart set on something/ set one's heart on; 一片丹心、心地、心宽体胖, etc.

The coach had set his heart on winning.

假若对父子家庭之间, 他比父亲心宽, 对国事他可比父亲更关心更发愁。 — 《四世同堂》

莫大年是心广体胖, 心里有什么, 嘴里却说什么。 — 《老舍作品集》

(3) Length is a one-dimensional space of an object. If heart is mapped onto another domain by length, it will have its length. Hence, we have such expressions as 心细, 粗心, 一条心, 寸心, 扣人心弦, 语重心长, etc. For examples:

You tug on my *heart string*.

他横下一条心，打算将此事一查到底。

“陈市长这番话，真是语重心长！”潘心诚慢慢睁开眼睛，赞叹地说。——《上海的早晨》

他没什么视见，可是他的老眼能看到的，他都苦心焦虑地思索，一点没敢粗心。——《老舍作品集》

Based on the examples mentioned above, we can conclude that different meanings of heart extend through mappings from space domain to human heart.

#### 4.1.2 Mapping from Other Domains to Heart

There are some other properties such as color, quantity, weight, temperature, tightness or hardness, etc. which can be mapped onto human heart.

Color is common and pervasive in our daily life. When color terms are associated with abstract concepts, color terms are used metaphorically. It is natural for us to map color terms onto the body domain. For examples: 黑心, 红心, 丹心, 灰心丧气, 赤胆忠心, etc. in Chinese and redneck, green lung, black leg, etc. in English all belong to this type of mapping. Some of these metaphors are easier to understand since the connotations are quite similar in both English and Chinese. For example, 黑心/black heart are similar in meaning, both portraying the evil people. However, some other metaphors are more difficult to understand since there is no correspondence between the Chinese and English expressions. For example, 红心、丹心、赤胆忠心 means utter devotion or loyalty for a country while in English there is no such an expression as *red heart*. But people use *purple heart* to express a kind of honor.

Some other domains such as temperature, hardness, taste and weight domains can be mapped onto heart as well. For examples, we have such expressions as *heart of gold*, *iron-hearted*, *stone-hearted*, *soft heart*; 心软, 心硬, 铁石心肠; *a cold heart*, *a warm heart*; 热心, 寒心, 滚烫的心; *a light heart*, *a heavy heart*, etc. Other examples:

他有一副热心肠，他的心很软，我的心一下子凉了半截。

他是一个心狠手辣的人。

It was *with a heavy heart* that Kate kissed her children goodbye.

Jenny is a warm-hearted woman.

What have been listed above belong to the temperature domain, hardness domain, taste domain, weight domain and so on. These can be felt by our senses directly, and when they are mapped onto other domains, they have the metaphorical meanings.

What's more, heart can also be seen as an object that can be broken, stolen, brought and so on. For examples, we have such expressions as 心碎/a broken heart, lose one's heart; steal one's heart, bring one's heart up into one's mouth, etc.

To sum up, meanings of these expressions can be understood as deriving from the metaphor *heart as an entity*. English and Chinese share most similarities in these mappings from other domains to heart.

#### 4.1.3 Mappings Between Heart and Other Body Parts

Some meanings of heart can be extended through mappings between human heart and other body parts based on the similarities in shape, position and function. For examples, we have the expressions like 手心, 眉心, 心腹, 心肝, etc. As we all know, heart is in the middle of the body, so 眉心 refers to the position between two eyebrows. This metaphor is based on the same position between two entities. 心眼 is a metaphor in Chinese, which is used so commonly that it has become part of the language. In a sense, 心眼 refers to intelligence and cleverness. This metaphor is based on the function of heart and eye. Heart is thought to be an organ by which human beings cognize the world. Eye is also a body part by which human beings cognize the world. The two organs have some similar functions.

To sum up, English metaphorical uses of heart is different from Chinese in the mapping between heart and other body parts.

### 5. Discussion of the Similarities and the Differences of Metaphorical Use of Heart in English and Chinese

In traditional Chinese culture, balance, harmony and symmetry are highly valued. This can be found in architecture, poetry, and many other domains. Language is even more affected by these values. Chinese four-word idioms are good illustration for antithesis. They often map bi-source domains onto one target domain. In contrast, the English do not emphasize balance, harmony, and symmetry so much as the Chinese. Instead, they value brevity and usually mapped onto one source domain onto the target domain.

Chinese metaphorical idioms often use bi-source domain to metaphorize a target domain. Take 撕心裂肺 as an

example: 撕 and 裂 are very strong actions to objects and the blending of these two verbs is mapped to the target domain 心肺. It means that someone is too sad and something or someone else has torn his heart.

However, English metaphorical idioms are often mono-source domain which is different Chinese. The cognitive process of English metaphorical idioms is easier than Chinese. But the difference is not absolute. Generally speaking, metaphorical idioms with bi-source domain concerning “heart” in Chinese are more than that in English, which is the result of different cultural and cognitive models.

## 6. Conclusion

Over the past twenty years, cognitive linguists have made great contribution to metaphor study. Their theories and findings have brought much impact on the research of the relationship between metaphors and human thoughts.

In this paper, two aspects are discussed from a cognitive perspective: 1) metaphorical mapping models of heart in Chinese and English; 2) similarities and differences between English and Chinese and the causes for this.

As for “heart”, the findings are as follow: 1) the main mapping model of heart is the mapping from non-body domain to heart; 2) English and Chinese metaphorical uses of heart share the similarities in the mappings from non-body domain to heart and from heart to non-body domain while they are different in the mapping between heart and other body parts.

To sum up, the metaphorical uses of heart in English and Chinese are more similar than different despite the differences in the nature of the two languages.

## References

- Black, M., (1962). *Models and Metaphors*. Ithaca, NY: Cornell University Press. Boyd, H.D. (1993). *Dimension of Language*. New York: Macmillan.
- Chen Jiaxu, (2007). *A Comparative Study of Metaphors Between English and Chinese*. Shanghai: Xuelin Publishing House.
- Dirven, R., (1985). Metaphor as a Basic Means for Extending the Lexicon. In Paprotte, W. and Dirven, R. *The Ubiquity of Metaphor: Metaphor in Language and Thought*. Amsterdam: John Benjamins Publishing Company.
- Fesmire, Steven A., (1994). Aerating the Mind: The Metaphor of Mental Functioning as Bodily Functioning. *Metaphor and Symbol*, (1).
- Lakoff, G. and Johnson, M., (1980). *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Lakoff, G., (1987). *Women, Fire and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Lakoff, G. and Turner, M., (1989). *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Lakoff, G., (1993). Contemporary Theory of Metaphor. In Ortony, A et al. (eds.), *Metaphor and Thought*, 202-251. Cambridge: Cambridge University Press.
- Lakoff, G., (1994). What is Metaphor? In Bardner, J and Holyoak, K(ed.). *Advances in Connectionist and Neural Computational Theory. Analogy, Metaphor, and Reminding*, Vol. 3. Norwood, NJ: Ablex.
- Lakoff, G. & Johnson, M., (1999). *Philosophy in the Flesh—The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.
- Wang Yin, (2002). The Philosophical Basis for Cognitive Linguistics: Embodied Philosophy. *Foreign Language Teaching and Research*, (1), 82-89.
- Zhao Yanfang, (2001). *An Introduction to Cognitive Linguistics*. Shanghai: Shanghai Foreign Language Education Press.

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).