

A Contrastive Cognitive Semantic Analysis of “Mountain” & “Shan”

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Abstract: Based on the related corpus of "mountain" and "shan," this study uses the principled polysemy analysis method to conduct a contrastive analysis of the cognitive meanings of the two words. It is found that the archetypal meaning of "mountain" is the same in English and Chinese, but the extended meaning derived from the metaphor is similar and different, which reflects the coexistence of universality and difference in the perception of the concept of the mountain by English and Chinese users. Therefore, foreign language vocabulary teaching should pay attention to the network structure of word meaning and grasp the archetypal meaning and the extended meaning of words.

Keywords: Mountain, Contrastive cognitive semantic analysis, Principled polysemy analysis.

1. Introduction

Language is a part of the culture and plays an important role in it. Semantics is one of the three elements that make up the language, and its cultural aspect is stronger than the other two elements. And vocabulary is the main carrier of linguistic meaning, both in form and content, and it directly reflects national culture.

The article compares the meaning of the word "mountain" in English and the word "shan" in Chinese, with the aim of exploring the universality and difference of cognition towards the same thing between Chinese and British. The two words chosen in this paper refer to the mountain, which is the most basic material in nature, and are also commonly used in both British and Chinese, so they are comparable to some extent.

Firstly, the Principled Polysemy Approach of cognitive semantics will be introduced, and some scholars have proved that the Principled Polysemy Approach is more suitable for a comprehensive analysis of word meanings than the traditional Component Analysis Approach; Then, by comparing "mountain" and "shan" in terms of their prototypical lexical concept or sense, we found out that they have the same prototypical lexical concept or sense, and different extended meanings, which reflects that British and Chinese native speakers have the same and different cognition of mountains.

The significance of this study is not only to describe the similarities and differences in the meanings of "mountain" and "shan" but also to explore the specific differences between British culture and Chinese culture in terms of word meanings. This article discusses this phenomenon in the hope that it will be helpful for foreign language vocabulary teaching, optimization of learning strategies and dictionary compilation, as well as for understanding the different cognitive habits and cross-cultural communication between the British and Chinese peoples[1].

2. Literature Review

2.1. The Principled Polysemy Approach

The component analysis is the major method of traditional lexical semantics to study the semantics of words and the semantic connections between words. This method

decomposes the meaning of words into a set of simple but universal semantic components, which are semantic elements that cannot be subdivided and have different functions to distinguish the meaning of words. However, cognitive semantics is different; it advocates that word meanings can reflect both human cognition and human emotion, and word meaning is connected to both the internal function of language and the external world to which language refers. The Principled polysemy Approach is the major method of analyzing lexical meaning in cognitive semantics, in which the semantics, conceptual elaboration, and syntax of words are studied simultaneously. Compared to traditional lexical semantics, the Principled Polysemy Approach is a more comprehensive and suitable method for studying and analyzing the meaning of words.

Lakoff's (1987) comprehensive cognitive semantic analysis of the preposition "over" is a pioneering study in cognitive semantics. After his analysis, Lakoff concluded that the lexical meanings of the word "over," which is a spatial relation, can form a conceptual category with internal structure, in which the terms of the meaning are different but closely related to each other[2]. Some of them have a typical effect, while others lack. Lakoff thus proposed the theory of radial categories, in which the interrelationship of word meanings forms a radial structure, and the center of the radial structure is the prototypical meaning.

Tyler and Evans (2003) have also previously studied the preposition "over." They agreed that Lakoff recognized and captured the polysemy of words in conceptual categories and added that it is essential to consider the role of context on word meaning since context helps distinguish between the two different concepts of polysemy and vagueness[3]. For example, indicative words such as "this" and "that" are not polysemy because polysemous terms must be related to each other, while "this" and "that" show more contextualized referential meaning. Later, Evans (2004) conducted a more extensive study, extending the survey to nouns and verbs, studying the noun "time" and the verb "fly," and again effectively confirming the feasibility of the previous study. Based on these studies, Evans (2004; 2006) proposed three criteria for a principled polysemantic approach: the meaning criterion, the concept elaboration criterion, and the

grammatical criterion. Also, Evans believes all word classes can be studied according to these three criteria.

2.2. A contrastive study of English-Chinese word meanings from a cognitive perspective

The contrastive studies of English and Chinese word meanings from a cognitive perspective are numerous. Chen Guohua (2008) presents a case study of "mei(beauty)." According to Chen, there are differences in the cognition and usage of "beauty" between English and Chinese languages. It is not related to women. This study is enlightening for the learning and teaching of English vocabulary. Qin Xiugui (2008) studied the conceptual metaphor of "eye" and found that the two languages share most of the symbolic projections of the concept of "eye," while only a few of them are unique to each other[4]. This study reflects that there are more homogeneities than differences in the thinking of the two peoples. Jia Dongmei and Lan Chun (2010) conducted a comparative analysis of the cognitive meanings of "shui" and water. They found that the two cultures have more similarities than differences in the cognition of water as a substance[5]. The expansion of word meanings and a proper explanation of the expansion principles are beneficial to vocabulary teaching.

3. Research Method

In this article, the Principled Polysemy Analysis approach is used to analyze the collected corpus of "mountain" and "shan" more comprehensively. The author firstly finds out the prototypical meanings and classifies each of them into the same and different extended purposes according to the lexical criteria and the conceptual metaphor theory of cognitive linguistics, and also analyzes each case to give the reader a clearer semantic picture of the two words "mountain" and "shan."

The corpus of this study is mainly from authoritative dictionaries and related corpora: Chinese corpus is mainly from Modern Chinese Dictionary (2016), Contemporary Chinese Dictionary and Online Xinhua Dictionary; English corpus is mainly from Oxford Advanced Learner's English-Chinese Dictionary (8th edition) and Longman Advanced Learner's English-Chinese Dictionary (3rd edition).

4. The Prototypical Meanings of "Shan" And "Mountain"

According to the English and Chinese dictionaries taken from this article, "mountain" and "shan" refer to the same object in Chinese and English; that is to say, their prototypical meanings are basically the same, and both of them refer to the same geographical environment for people to live in. In the Modern Chinese Dictionary (7th edition), page 1135, the definition of "shan" is: di mian shang you tu huo shi xing cheng de gao song de bu fen (a towering part of the ground formed by earth or stone)[6]. The definition of "mountain" in the Oxford Advanced Learner's Dictionary of English and Chinese, page 947, is a very high hill, often with rocks near the top[8]. The word "shan" in Chinese culture and "mountain" in British culture refer to the same material of the outside world.

I also found in all the dictionaries extracted that both "mountain" and "shan" share the concept of hills or mountains. For example:

- (1) Shan-xi (the mountain chain)
- (2) a-er-bei-si-shan (the Alps)
- (3) the Himalayas
- (4) a chain of mountains
- (5) Snow was falling on the mountain tops.

In the above phrases and sentences, both of them refer to the natural geography from the lexical criterion. In terms of concept elaboration criterion, the word "mountain" refers to mountains or hills with a qualifying element. In terms of the grammatical criterion, "mountain" refers to mountains or hills in the plural form. The consistency of the prototypical meanings of "mountain" and "shan" indicates a universal cognition of this natural substance between Chinese and British cultures. At the same time, it also shows that English and Chinese cultures have comparative cognition of the same thing. However, the cultural connotation of the Chinese character "shan" is relatively richer than that of "mountain" in English. In the author's opinion, the main reason is that China is mountainous and belongs to the continental geographical environment, while Britain is mainly near the sea and belongs to the Marine geographical environment. Different geographical settings may lead to different cultural archetypes.

5. Expansion of the Meaning of the Words "Mountain" And "Shan"

According to Lakoff and Johnson, metaphor is a cognitive exchange activity in which experience in one field is used to illustrate or understand experience in another field, and its formation is closely related to human physical experience and culture[10]. The basic idea of conceptual metaphor is that metaphor is not only a linguistic phenomenon but also a primary means of human understanding and cognition. Human thought is metaphorical, and metaphorical language expresses metaphorical thought. In both languages, various features of mountains are used as rich metaphors. Still, the differences between the British and Chinese culture are also reflected in the similarities and differences between the meanings of the words "mountain" and "shan."

5.1. The same extended semantics

First of all, the mountain can be metaphorically represented as a large number in both English and Chinese. In China, since mountainous areas account for more than 2/3 of the country's total area, in addition to their large size, people often use mountains as a metaphor for "large number." For example:

- (6) ren-shan-ren-hai (people mountain people sea) "a sea of people"
- (7) En-zhong-ru-shan (favor is as heavy as a mountain)"deep favor"
- (8) a mountain of flesh;
- (9) the butter mountain (large unsold amount of butter in the EEC)
- (10) Dui-ji-ru-shan (pile up like a mountain) "mountains of"
- (11) Aggie looked from the child to the heap of rags, then down at the mountain of clothes covering her own body.

In example (6), the Chinese idiom "ren-shan-ren-hai" is similar to the English phrase "a (huge) sea of people," both of which describe the gathering of a large number of people. Although the Chinese characters "shan(mountain)" and "hai(sea)" refer to different substances, they are both metaphorically used here to mean a large number of people.

Mountains can be metaphorized as difficulties in both

English and Chinese. Since the mountain is of a certain height and challenging to conquer, which is like the difficulties people meet in their life. This similar experience creates a metaphorical relationship between mountains and difficulties, and both exist in Chinese and English cultures.

(12) san-zuo-da-shan (three mountains)“three difficult things”

(13) dao-shan-huo-hai (blades-mountain-fire-sea)“a mountain of blades and a sea of fire”

(14) If the mountain will not come to Mahomet, Mahomet must go to the mountain.

(15) yu-gong-yi-shan “a foolish old man who moved mountain”

(16) Make a mountain (out) of a molehill

Example (13) "dao-shan-huo-hai" means extreme danger in Chinese. In example(14), the metaphorical meaning is that things do not give way to people, and people give way to something. Example (16) is a proverb from the Bible. A molehill is a "little mound of earth" built by a mole, which is a metaphor for "a small, meaningless thing, a small obstacle" that is not worth mentioning compared to a real mountain (which is a metaphor for a great difficulty).

There is also a metaphorical relationship between the power of a high mountain and great strength. Although power is an abstract concept, people can always understand the power of mountains because they always give people the impression of being high and majestic. In Chinese, the overwhelming power of a mountain is expressed by the words "pai-shan-dao-hai" (topple the mountains and overturn the seas), "li-ke-ba-shan" (a force can pull down a mountain), and "shan-hu-hai-xiao" (the mountains and the sea are howling and roaring). In English, there is a saying that also expresses the power of mountains: The mountain had brought forth a mouse (Its metaphorical meaning is that the effort is great, but the effect is small; equivalent to "the sound of thunder is big, but the rain is small").

5.2. The different extended semantics

Due to the different cultural characteristics of China and Britain, "mountain" and "s-han" in the two languages have their unique conceptual metaphors.

5.2.1. The unique expanded semantics of Chinese

In Chinese people's cognition, mountains are solid and hard to collapse, so the metaphorical relationship between the material domain of "solid" and the temporal domain of "long" is also formed. There are many idioms to express this metaphor in Chinese, for example: "shou-bi-nan-shan" (Longevity is longer than South Mountain), "tie-zheng-ru-shan (Iron evidence is like a mountain)," "shan-meng-hai-shi(Mount-ain alliance and sea oath)," "he-shan-dai-li(River and mountain stripe hone)." These idioms use the longevity of the mountain as a metaphor for people's longevity, evidence, oath, and country, respectively.

In the idiom of "Kai-shan-zu-shi (open mountain founder)," "shan(mountain)" is used as a metaphor for "skill or cause." The Chinese character "shan(mountain)" is the object of the verb "open," and opening up a mountain and starting a school of scholarship requires hard work, so "mountain" has some similarities with "scholarship and skill." Similar expressions are: "kai-shan-bi-zu","kai-shan-lao-zu","jai-shan-shi-zu".

"Shan" in Chinese is often used metaphorically as a "theme" as well. Because the mountain is protruding, and the theme is also generally in a prominent position in an article.

For example, the idiom "kai-men-jian-shan(open the door on a view of mountain)" means "cut to the chase" in English.

(17) Wo de shi jian bu duo le, suo yi wo kai men jian shan de wen ta shi fou hai shi yi hun ren shi.

I didn't have long to talk so I cut to the chase and asked whether he was still married.

In ancient times, the literati often chose to stay away from secular society because their talent remained unrecognized. So they stay away from fame and fortune and return to the remote mountains. For example, "shan yin" (mountain seclusion) means live in Seclusion; "shan gu zhi shi"(mountain valley of people) means "A hermit living in the remote mountains."

Mountains are often regarded as an important part of a country's territory, and the Chinese character "Jiang-shan" also represents power and status. The Chinese character "Jiang-shan" is often used to refer to the territory of a country, which is also a metaphor derived from metonymy. Therefore, there are metaphors in Chinese such as "jiang-shan-ru-gu"(The mountains look the same, metaphorically speaking, things have changed), "da-jiang-shan"(fight for the country), and "ban-bi-jiang-shan"(half the country).

(18) Jiang shan ru gu,ke shi wu shi ren fei.

The mountains and rivers are the same, but things are different.

Mountains are also used as a metaphor for the important people in Chinese. Mount Taishan,the head of the Five Mountains, holds an important position among all mountains, and the important people generally hold an essential position in a certain field, thus creating a metaphorical relationship between mountains and the important people.

(19) Tai-shan-bei-dou(Mount Tai and the North Star) "a leading or eminent authority or scholar or artist."

(20) you-yan-bu-shi-tai-shan(have eyes don't recognize Mount Tai)"entertain an angel unawares".

Mountains are characterized by hardness and perseverance, and similarly, some people have noble character, so noble character is also a metaphor for mountains. The phrase "shan-gao-shui-chang" (mountains high and waters long) is a unique expression in Chinese.

In addition, mountains are perceived as complex, tall, handsome, majestic, and sober, and these characters have a high degree of similarity with traditional Chinese men: majestic, tall, strong, and silent. There is also a folk saying that a man is a mountain and a woman is water. Therefore, the mountain is also often used as a metaphor for man in Chinese, but this metaphor often appears in literature.

(21) Nan ren, jiu shi yi zuo wei an de gao shan,ke yi gei bie ren dai lai yi kao.

Man, is a great mountain, can bring security for others to rely on.

(22) Ba ba shi wo men yu dao kuang feng shi, wei wo men zu dang feng han de shan.

Dad is the mountain that shields us from the wind and cold when we encounter ga-le force winds.

In terms of the overall shape of a mountain, there are peaks and valleys, uphill and downhill, gentle mountains, and precipitous cliffs. The development of some things can also show a good and a low state; there are ups and downs. People also often use the various mountain parts to describe the different states of development. Therefore, in Chinese, "shan-gu"(valley) is used as a metaphor for the downs and disappointments of life, while "shan-ding"(mountain top) is used as a metaphor for the success of life.

(23) Hen duo ren ba shan gu kan cheng ren sheng de ku nan, kan cheng shi shi ban de dai ming ci.

Many people see the valley as a life hardship and as synonymous with failure.

(24) Shan gu he shan ding dou shi ren sheng bao gui de jing li.

Both the downs and ups are valuable experiences in life.

From ancient times, Chinese people have obtained various food materials, herbs, and other resources from the mountains. Therefore, mountains in Chinese are often used as a metaphor for survival resources or things people rely on for survival. Based on this experience, metaphorical expressions such as "kao-shan-chi-shan, kao-shui-chi-chi-shui" (backer has mountain, draft relying on water), and "liu-de-qing-shan-zai, bu-pa-mei-chai-shao" (when there's life, there's hope) have been formed.

(25) Su hua shuo de hao, kao shan chi shan, kao shui chi shui, wo men nong min, zhong hao zhuang jia cai shi gen ben.

As the saying goes, "backer has mountain, draft relying on water," we farmers, planting good crops is the real deal!

(26) Sui shuo fu mu shi hai zi de kao shan, dan shi ye bu neng tai ni ai hai zi.

Although parents are the backbone of their children, but they should not spoil their children too much.

5.2.2. The unique expanded semantics of English

A few idiomatic uses of "mountain" cannot be understood literally, and the English expressions associated with it do not have the imagery of a mountain. In terms of conceptual elaboration, the conceptual metaphor of "mountain" may be based on the nature of the mountain, on the physical experience of the speaker, or a combination of both. In terms of grammatical elaboration criteria, most of these uses are fixed collocations. For example:

(27) Vera Pinder had proved to be a formidable mountain of a woman, verging on caricature, who refused to listen to a word.

(28) "You wouldn't notice him unless you fell over him. You can't surprise a mountain."

(29) He walked like a mountain should walk, too, striding without upheaval, drawing his

(30) He that boy has got a heart as big as a mountain. I'll tell you, in those situations, he will sling himself at anything.

In example (27), the sea is much more explored in Britain than the mountains because of the topography. The unpredictable nature of mountains makes them "scary and intimidating" to the British, and they are often used as a metaphor for fearful people in English. In both examples (28) and (29), the character traits of people are metaphorically represented by the quietness and stability of the mountain, respectively. Mountains allow all kinds of trees to grow, so they are also often used as a metaphor for the goodness of the human heart, which is well illustrated in example (30).

However, there is little symbolism in British culture. Because Britain is not a mountainous continental country like China, there are relatively few mountain-related cultures. People depended on the sea for survival in the early days. The maritime geography makes the British people struggle with the sea. And the British people enjoy exploring nature. As a result, the thousands of years of development in Britain have shaped a typical "maritime civilization," which also provides a rich cultural symbolism for English expressions. For example: ship a sea; head the sea; all at sea; and so on. These English expressions contain rich cultural information about Britain and reflect the brave character traits of the British in

exploring nature.

6. Discussion

From the above interpretation, we know that the distribution of metaphorical projections of mountains in both languages has similarities and differences, and the differences are more than the similarities. Since the human body's experience is the basis of metaphorical mapping, the same conceptual metaphors will be exhibited in both languages. In other words, the mapping is not arbitrary but is rooted in the human body, in the human's daily experience and awareness.

The similarity between the commonality of human cognitive experience and the objective world on which they depend makes the metaphorical phenomenon better understood by people from different cultural backgrounds. Therefore, although the language systems used by different ethnic groups are not the same, these metaphors rooted in different cultural backgrounds overlap based on common cognitive structures and experiences. In the process of metaphorical cognition of "mountain" in English and Chinese, people share the same cognitive ability, thinking process, and knowledge and experience of certain common geographical environment, and similar metaphorical expressions of "mountain" are also present in both languages.

However, why does the conceptual metaphor of "mountain" tend to be more "different" than "the same" in English and Chinese? Why is this particular conceptual metaphor of "mountain" rarely found in English? Mountains are an important part of Chinese culture. China is a vast country with diverse landscapes, mostly high mountains in the central and western regions and hills in the southeast, forming a majestic landscape environment with a thousand peaks. The unique geographical environment and Chinese cultural psychology have greatly inspired Chinese people's life, and many metaphorical expressions related to "mountains" have been created in Chinese.

In addition, Chinese and British perceptions of the relationship between heaven and man, the universe and nature, and how to treat the relationship between man and nature may lead to differences in how metaphors are presented. The ancient Chinese philosophers saw the whole world as an interdependent whole. The purpose of human understanding of nature is to find the laws of its operation, or the Tao, so as to achieve the goal of the following nature. Therefore, many scholars and literati in ancient China were dissatisfied with the feudal hierarchy at that time. To stay away from fame and fortune, they lived in seclusion in the remote mountains, isolated from the world, pursued freedom and liberty, and advocated the unity of man and nature.

The projection of the conceptual metaphor of "shan(mountain)" in Chinese and English, whether it is shared or unique to Chinese, is based on the human experience and perception of the distinctive features of mountains. Since different peoples have the same basic characteristics and experience perceptions of the same thing, they have the same perceptions in their experiences, so even different conceptual systems have commonalities so that people will recognize or construct the same abstract ideas based on their own experiences. In the concept of "shan(mountain)," there are inevitably significant cognitive differences between the English and Chinese communities, and this has led to different metaphorical projections, mainly because of the continental geographical environment in which the Chinese people live, which makes the metaphorical expression of

"mountain" in Chinese even richer. Only by understanding this can we better understand the English and Chinese languages and the cultural meanings they contain, and can we communicate effectively across cultures.

7. Discussion

From the above elaboration, comparison, and classification of the prototypical meanings and semantic expansion of "mountain" and "shan," we can find that the three criteria of the Principled Multiple Meaning Analysis are applicable to the comparative study of English-Chinese word meanings, which can build a transparent semantic expansion network for us.

Therefore, in the author's opinion, in English vocabulary teaching, a reasonable explanation of the expansion of word meanings and the principle of expansion can help students consciously recognize the relationship between the meanings of multiple words and also help them better grasp the knowledge of self-learning, to improve their learning effect. Therefore, in teaching English vocabulary, it is important to pay attention to mastering the prototypical word meanings and the expanded meanings, rather than limiting them to the prototypical word meanings. Therefore, using cognitive lexical theory to guide English vocabulary teaching is worthwhile. The advantage of this approach is that it helps students to learn from the prototypical meaning to the extended meaning and to understand the culture from the meaning of words.

However, the etymological sources of "mountain" and "shan" collected in this study are limited to these five

dictionaries. There is no folk corpus, therefore there are certain limitations in this article.

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