A Comparison on the Semantic Chains of "Guang" and "light" from the Perspective of Cognitive Linguistics

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Abstract

Polysemy of the words is the most basic feature of natural language, which is the universal existential state of the meaning of the word, meanwhile is also an important subject of cognitive linguistic research. Many cognitive linguists try to use categorization and prototype category theory to explain the phenomenon of polysemy, in general, all meanings of a polysemous word constitute a complex category, in which these meanings constitute a semantic micro-system, or semantic chain by virtue of family resemblance, and the realization of semantic extension is mainly through metaphor and metonymy. By comparing the semantic chains of "Guang" in Chinese and "light" in English, this paper examines the similarities and differences of cognitive styles in different language communities.

Keywords

Cognitive linguistics, polysemy, "Guang", "light".

1. Introduction

Categorization is the basis of conceptualization and meaning formation, and also the starting point of language use as well as one of the core contents of cognitive linguistics. Cognitive linguistics claims that categorization is a psychological process based on interactive experience, which starts from the interaction between human and the objective world, and aims to subjectively generalize and categorize external things. Thus, it is a basic cognitive way for human beings to understand the world. After categorization, category is formed, and the concept corresponds to category. Based on this, meaning is formed, and meaning is endowed with certain linguistic symbols, consequently becoming a linguistic form. Cognitive semantics, which emerged under the background of cognitive linguistics in the late 1980s, holds that the basic functions of language are categorization and conveying meaning. Cognitive linguists believe that the meaning of language is not limited to the internal structure of language, and the objective semantic analysis method cannot be tenable. In other words, semantics mainly originates from the interactive cognition between human and the objective world, and derives from language users' understanding of the world. Semantics is the process and result of conceptualization, and this process is also based on experience. Taylor pointed out that the meanings of linguistic forms are rooted in the speaker 's knowledge system and that it is difficult to distinguish pure linguistic knowledge from encyclopedic knowledge [1]. Human beings categorize the world through language. Furthermore, human beings categorize the language itself, so categorization and linguistics are inseparable, and it is the kernel theme of the linguistic research. For more than 2000 years after the appearance of classical category theory originated from Aristotle 's category theory, Aristotle 's classical category theory has been dominant until Wittgenstein proposed the family resemblance. Since then, The classical category theory of Aristotle based on sufficient and necessary conditions has been constantly challenged and questioned by the academic community. Rosch developed Wittgenstein's family resemblance theory and proposed the concept of prototype [2].

Lakoff further confirmed and developed prototype categorization through a series of experiments [3], Langacker proposed two types of categorization, namely prototype categorization and schema categorization [4], Taylor further pointed out that prototype representation categorization or schema representation categorization is actually a different aspect of the same phenomenon, the difference lies in that in the former category members are only partially consistent with prototype representation, while in the latter category members are partially consistent with the schematic representation [1]. In other words, schema representation is hierarchical. Both categorizations are effective. As more and more people begin to pay attention to the prototype category theory, the prototype category theory has gradually been recognized in the academic circles. The prototype category theory is totally different from the classical category theory. The prototype category theory believes that it is impossible for people to understand the world completely objectively. The members belonging to the same category do not share all the common characteristics. These members are linked by family resemblance, and degree of their membership varies. There are typical members and marginal members, and the boundary of category is not clear. The vigorous development of many disciplines cannot be separated from the prototype category theory, among which cognitive linguistics is also prominent. Therefore, cognitive linguistics also attaches great importance to categorization and prototype category theory.

Prototype theory has a strong explanatory power for the semantic micro-system established by a polysemous word [5, 6]. Polysemy is the most basic feature of natural language, a universal phenomenon across languages, and an important topic in cognitive linguistics. Word meaning is the result of human conceptualization. Polysemy reflects the conceptual organization and cognitive style in mind. In the long-term development of natural language, the limited meaning of a word is extended, which not only conforms to the economic principle of language communication, but also fills the blank of vocabulary and enhances the ability of language expression. As a result, It is the inevitable result of historical development. All the meanings of a polysemous word form a complex category, in which the most central and central meaning is the prototype meaning, and then on the basis of the prototype meaning, to extend outward through metaphor, metonymy and other means , we can obtain a non-central and more marginal meaning, and then on the basis of this lower prototype meaning, by virtue of further outward extension, we will obtain a more marginal meaning, with the consequence of forming a semantic network. The connection between adjacent semantic nodes in this semantic network is more obvious, and the connection between relatively distant semantic nodes is relatively insignificant. Therefore, the status of each semantic item in the semantic network or semantic chain is not equal. Unlike the classical category theory, which assigns all meanings to the same status, they do not all have the same attributes. However, the relationship between them is not arbitrary, but organized through family resemblance, metaphor, metonymy and other mechanisms. Taylor explains the semantic chain as follows: Each meaning of a polysemy constitutes a category [1]. In this category, there is a connection between the meanings. This connection not only exists between adjacent meanings, but also between other meanings. In a semantic chain, each node can be seen in principle as the source of other meanings in semantic extensions.

Metaphor plays an important role in the meaning construction and evolution of language. The polysemy of symbols in natural language is mostly derived from metaphorical expressions [3, 7]. That is to say, most polysemy can be seen as the result of metaphorization. Due to the lack of vocabulary, in order to ensure the smooth progress of communication, human beings need to name new things. The main means is to use metaphor to discover the similarity between the source domains and the target domains, so as to realize and deepen the understanding of new things by replacing entities of target domains with names of source domains.

Light is a very common natural phenomenon around the world. This paper will compare the semantic chain and their extension mechanism of "Guang" in Chinese and "light" in English to investigate the similarities and differences of cognitive styles in Chinese and English language communities.

2. The Semantic Chains of "Guang" and "light" and Their Comparison

2.1. The Semantic Chains of "Guang" and Their Formation Process

The meanings included in different dictionaries are certainly not exactly the same, but in general, the meanings included in authoritative dictionaries are basically the same and slightly different. This paper selects the definition of "Guang" as the retrieval object in the seventh edition of the Modern Chinese Dictionary, and analyzes the extension mechanism of the semantic chains of "Guang" in a diachronic and synchronic way.

In the second edition of the Ancient Chinese Dictionary (2013), the basic meaning of light is bright and glorious. In Zhan Guo Ce • Qi Ce Liu, we find "Guang" in "Ming Gao Tian Xia, Guang Zhao Ling Guo." during the Warring States Time and in Hou Han Shu • Feng Yan Zhuan, we find "Guang" in "Gong Yu Ri Yue Qi Guang Xi" in Han Dynasty. These convergently prove that the original meaning of "Guang" is "bright, brilliance".

The definition of "Guang" in the seventh (latest) edition of Modern Chinese Dictionary (2016) is as follows: "Guang":

(1) <Noun> (light)

(2) <Noun> (scenery)

(3) <Noun> (glory)

(4) <Noun> (benefit)

(5) <Noun> (visit "honorific expression")

(6) <Noun> (glorify)

(7) <Noun> (brightness)

(8) <Adjective> (smooth)

(9) <Adjective> (bare)

(10) <Verb> (bare)

(11) <Adverb> (only)

In the semantic chains of "Guang", (1) is the most basic prototypical meaning. The core principle of cognitive linguistics is "reality-cognition-language", which is formed on the basis of "interactive experience" and "cognitive processing" of the real world. Every day people can feel the day and night; light and darkness as the opposite, and the dark is always full of uncertainties, which make people associate darkness with fear and anxiety. "Guang", on the contrary, is associated with brightness. Based on the theory that metaphor is usually formed from the concrete and tangible conceptual domain to cognitively intangible and abstract conceptual domain, so as to establish the relationship between the two domains, gradually achieving the understanding of unknown, abstract things, the prototypical meaning of "Guang" (1) "light" is extended to (2) "scenery" through metaphor. Fundamentally speaking, metaphor is to use one thing to understand and experience another, between which the bridge is their similarity, including physical similarity and psychological similarity. By highlighting the "glory" attribute of "Guang", (1) is extended to (3) "glory". Through the similarity between glory and benefit, (3) further extends to (4) "benefit". light is often used in honorific expressions of visits, so (3) further expands to (5) "visit". On the basis of (3), (6) "glorify", strictly speaking, should be the causative usage. Light has experienced grammatical metonymy, thus activating the meaning of (6). (7) "Brightness" highlights the bright attribute of "Guang", so the prototypical meaning (1)

extends to the meaning of (7) by metaphor. (7) is often used as attributives to modify nouns in sentences, and there is no friction on the surface of the smooth object, then after grammatical metonymy, the adjective meaning of (8) "smooth" is obtained. According to this similarity between "Guang" and "bare" in Chinese, the meaning of (9)(bare) is obtained by metaphor. Then, the causative usage of (10) "bare" is obtained by grammatical metonymy. Finally, the meaning of "Guang" is gradually weakened due to the frequent modification of verbs in modern times and the fixed syntactic position, meanwhile, the meaning of (10) is similar to that of (11) only, therefore the meaning of "bare" is extended to the adverb meaning of (11) "only" through grammatical metaphor and metonymy.

It can be concluded that in this semantic network, there are both chain structures and radiation structures. The semantic chains of "Guang" are basically in line with the cognitive law of cognitive linguistics for the formation of polysemous semantic chains. Human beings always use the known specific things to understand the unknown and abstract things. The semantic network of "Guang" starts from the most prototypical meaning, and gradually forms an organic unity through the continuous extension and expansion of family resemblance, metaphor and metonymy.

2.2. The Semantic Chains of "light" and Their Formation Process

The author has consulted Oxford Advanced English Learner's Dictionary and Cambridge Network Dictionary, synthesized their definitions of "light", and finally selected the main meanings of "light" as the research object. At the same time, the author also adopted the combination of diachronic and synchronic methods to analyze the formation mechanism of its semantic chains:"light":

N:

(1) the energy from the sun, a lamp, etc. that makes it possible to see things

(2) a particular type of light with its own colour and qualities

(3) a thing that produces light, especially an electric light

(4) a match or device with which you can light a cigarette

(5) an expression in somebody's eyes which shows what they are thinking or feeling

(6) light colours in a picture, which contrast with darker ones

(7) a window or an opening to allow light in

Adj:

(8) Not weighing a lot

(9) Light clothes are made of thin material that allows you to be cool.

(10) lit by the natural light of the day

(11) (of colours) pale

(12) entertaining and easily understood, but not serious and not intended to make you think

(13) Not great in strength or amount

V:

(14) to start to burn or to make something start to burn

(15) to produce light that makes an object or area bright or easy to see

The author searched the online etymology dictionary, and finds that the word "light" originates from the ancient English "leoht" and "leht", and the basic meaning is the material that can make the object glow, which proves that the prototypical meaning of the word "light" is basically the same as "Guang". In other words, the prototype meaning in the light semantic chain is (1), (2) is the concretization of (1). Human language is formed on the basis of the interactive experience of human beings and reality, and the tool of emitting light is connected with light. Through this connection, the meaning of (3) is obtained through metaphor extension, and people obtain the

image schema in the process of interactive experience with the objective world. According to the source-path-target consciousness image discussed by lakoff, light is emitted, transmitted and finally reached the destination. Through the natural transfer between source and path, semantic extension occurs. Then by the meaning of "light through the window" (7) is extended from (3). The verb meaning (15) is activated through grammatical metaphor and metonymy, and the part of speech is changed. Then light can transmit energy and heat, so it can be used to light things. The meaning of (4) is expanded through metaphor. Then, the verb meaning of (14) is activated through grammatical metaphor and metonymy, and the part of speech is changed at the same time. The mapping from conceptual domain to the abstract conceptual domain is realized, and then the meaning of (5) is evolved. Just as light and darkness always appear in opposite ways, and by highlighting the bright nature of "light", metonymy of (2) occurs, so we obtain (6), which is just opposite to dark color. The light in real life is untouchable, transparent, and it has no weight to perceive, so the prototypical meaning of (1) is further metonymized as (8) and (9), and the part of speech becomes adjective. As mentioned above, light can illuminate objects, according to this similarity, highlighting the bright characteristics of "light", (1), through grammatical metonymy, further obtains the part of speech of (10). Likewise, (6) is also extended to (11), and (8) is mapped from the specific conceptual domain to the abstract conceptual domain, which activates (12) and (13) by metaphor.

From the semantic chains of "light", it can be clearly seen that the extension of the semantic extension of this word is basically consistent with the general human cognitive law that gradually extends from concrete and visible meanings to abstract meanings. Among them, metaphor and metonymy plays a very important role, which also involves the change of part of speech: the part of speech of "light" converts from nouns to adjectives and verbs.

2.3. The Comparison of Semantic Chains of "Guang" and "light"

There is little difference between the prototypical meanings of "Guang" and "light", which are substances that make objects visible, but their extended meanings are quite different. In Chinese, "Guang" extends the meaning of glory through the opposition between "light" and "darkness", and further extends the meaning of benefit through the similarity between glory and benefit. After that, light experienced grammatical metonymy and activated the verbal meaning of "glorify". The prototype meaning of "Guang" experienced a series of metaphor and metonymy and obtained the "smooth" nominal meaning and the "smooth and bare" two adjective meanings. Then it turns into the verb "bare", and finally becomes the adverb "only" in modern times. In contrast, "light" has taken a different way of extension. After the most prototype meaning is concretized, the meaning of light tool is obtained through metaphor extension, and then it is extended to the meaning of "light through the window", through the natural transfer semantics between the source and the path. The meaning of light tool activates the meaning of verb light through grammatical metaphor and metonymy. The prototype meaning expands to the meaning of matches or lighters through metaphor, and then activates the verb meaning of igniting through grammatical metaphor and metonymy. The specific light then evolves into the meaning of eyesight, and obtains the light color meaning through metonymy. The prototype meaning is further converted to light in weight, and the part of speech becomes an adjective. Meanwhile, the prototype meaning is further converted to bright, and the part of speech becomes an adjective. Similarly, light color is also extended to light color adjective part of speech. Light adjective part of speech is mapped from the specific concept domain to the abstract concept domain, and the two adjective parts of speech, happy and weak, are activated through metaphor.

The semantic chains of the two words are an organic unity gradually formed by the continuous outward extension of the central meaning of a prototype. The marginal meaning is gradually separated from the prototype meaning, but the connection between them can still be found.

The semantics can be extended based on metaphor, metonymy, concretization and other means. "Guang" and "light" both evolves from the basic meaning "substance which can make things bright" to light and bright adjective meaning. Although the seventh edition of the Modern Chinese Dictionary treats the meaning of "Ming Liang" into nouns, it can still be observed that the mappings of English and Chinese language communities from noun "light" to adjective "bright" are basically the same. In addition, both Chinese and English have mappings from specific conceptual domains to abstract conceptual domains, such as the mapping of specific "Guang" to "Jing Se/scenery" and the mapping of "light in weight" to "relaxed and happy", which are consistent with the general cognitive law of understanding abstract things through specific things. However, language is deeply rooted in culture. For example, metaphor is essentially based on the similarity between the two things to construct their connection, and then recognize another thing through one known thing. This similarity varies with cognitive subjects, which is closely related to their cognitive style, social culture, traditional habits, language pragmatics, background knowledge and other factors.

The salient points that cognitive subjects look for are also different, for example, in Chinese similarity between "Guang" and "glory" is built, similarity between "smooth" and 'bare' is built, while in English similarity between "light" and "light in color", "light in weight' and "happy", etc. is built; "Guang" extends to the verb meaning of "bare/reveal", while "light" extends to the verb meaning of "ignite" and "brighten"; "Guang" is also converted as the adverb meaning of "only", while the adverb meaning of "light" is not conventionalized. The highlighted characteristics of "Guang" and "light" are vastly different, which also cause the salient difference in their extended meanings despite the same prototype meaning.

3. Conclusion

By comparing the semantic chains of "Guang" and "light" and their extension process, it is found that the semantic chains of "Guang" and "light" are consistent with the prototype category theory. Based on the prototype meaning, their meaning chains are extended through metaphor, metonymy and concretization, and finally form an organic network. The core principle of cognitive linguistics, "reality-cognition-language", points out that language is the result of human's interactive experience and "cognitive processing" of the objects in outside world, which includes both objective understanding of the external world and subjective initiative. When the prototypical meanings of "Guang" and "light" are basically the identical, the extended non-prototype meanings are vastly different, which is sufficient to prove that due to the fact that human beings have the same body structure, in the process of perception of the objective world, they will also obtain similar perceptual experience, and accordingly there will be similarities between conceptualization and categorization. However, universality is always accompanied by idiosyncrasy. Experience is the subjective experience of the cognitive subject. Different cognitive subjects of the same objective object will inevitably affect the cognitive results. The cognitive results of different language communities on the same objective object are also vastly different. Secondly, the semantic extensions of "Guang" and "light" are in line with the general cognitive law of abstract and unknown things. Metaphor plays an important role in the semantic extension of these two words. Metaphor helps achieve the understanding of new things by constructing the similarity between old and new things. However, the construction of similarity between different things is different due to language communities. The prominent attribute of each language community in the process of metaphorical mapping is also vastly different, resulting in significant differences in the non-prototype semantics of the two words.

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