The Enlightenment of Polysemous Vocabulary Teaching from the Perspective of Cognitive Linguistics

Hu Meiwen

Ludong University, Yantai Shandong, 264025, China

Abstract: The interpretation of polysemous phenomenon in traditional linguistics is not satisfactory, ignoring the relevance of each meaning. The prototype theory, metaphor and metonymy can explain the phenomenon and make up for the deficiency of traditional linguistics. Cognitive linguistics emphasizes the experiential and cognitive aspects of language. The generation of meaning in word-formation can be explained, which reflects that human cognition extends inward from human body experience and spatial perception to human mind and outward to external environment. In addition, polysemy is closely related to cultural factors, with interlingual commonness and interlingual differences. The findings can promote the vocabulary teaching, requiring the combination of word meaning with people's cognitive experience.

Keywords: polysemy, vocabulary teaching, cognitive linguistics, prototype theory, experiential philosophy

1. Introduction

In the process of recognizing new things and expanding their cognitive ranges, human beings always construct the concept of new things by specific cognitive activities. As human knowledge increases, so does the language used to shape it. From the perspective of cognition, compared with the increasing number of words, it is more meaningful to enrich the semantic meaning of existing words. Polysemy has become the inevitable trend of language development. Meaning is something objective and independent of individual consciousness. Therefore, polysemy is difficult to be explained. Lakoff and Johnson put forward the language philosophy of "non-objectivism". The philosophy of experience is the philosophical basis of cognitive linguistics. The philosophy of experience holds that the subject and object interact with each other, from which human cognition comes. Meaning is the most variable element in vocabulary information. It is the core and difficulty of vocabulary, and polysemy is even more difficult. For English teachers, helping students better grasp the accurate meaning of vocabulary is indeed a difficult point in the process of English vocabulary teaching. Cognitive metaphor and metonymy theory in cognitive linguistics can connect the basic meaning and extended meaning of a word well so as to achieve a profound understanding of the meaning of English vocabulary and provide new enlightenment for the teaching of polysemy in English vocabulary teaching. According to the prototype category theory in cognitive linguistics, each member of a category is based on the "prototype" category within the category, and the relevance of its members is derived from the potential family similarity among members, which provides a theoretical basis for better explaining the phenomenon of "polysemous word".

2. The Cognitive Understanding of Polysemy

Cognitive semantics holds that semantic structure is related to human perception and cognition of the world, and the development of semantics is the result of metaphorical thinking. The use of prototype theory and metaphor can better explain the reasons for the formation of polysemous words and the relationship between their meanings. What's more, the experiential philosophy means a lot in the process of memorizing words.

2.1 Prototype Theory

Cognitive linguists believe that each basis within a category has different typicality due to its
number of category characteristics. Prototype is the most typical meaning in the category, while some of the other meanings are typical and some are not. Understanding the basic categories with typical characteristics is the entry point for people to understand the world affairs, and then expand to the upper and lower categories on the basis of the basic categories. According to archetypal category theory, a polysemy is a category composed of its various meanings.[3] In this category, the meanings have different positions among them. The typical meanings in the central position are the archetypal ones, while the non-typical ones are the marginal ones. Archetypal meaning is the most representative and typical meaning. It is the earliest acquired meaning of language signs and is often the basic category vocabulary that people first recognize. The superordinate category vocabulary and the subordinate category vocabulary are generally developed later than the basic category vocabulary. Therefore, the development of polysemous words is a process from the basic level to the subordinate level. Lakoff summarized the derivation of polysemous words into three structures: chain, radiation and the combination of chain and radiation.[4] The derivation of meaning in the word “candidate” can be expressed as chain: meaning 1 (the person in white) → meaning 1 (the person in white) + meaning 2 (the person seeking official office) → meaning 2 (the person seeking official office). Liao Guangrong analyzed the relationship between the meanings of “exchange” and pointed out that the derivations of the meanings of Exchange formed a radiative structure.[5]

Several studies have shown that the "prototype" within a semantic category is more easily acquired by learners. From the perspective of teaching, only when teachers give priority to students to learn and fully grasp the meaning of "prototype" in the semantic category, can they better use the method of associative memory to memorize other words, which is the so-called "prototype effect" in the semantic category theory. This "prototype effect" has a great enlightening effect on the teaching of polysemy.

2.2 Conceptual Metaphor Theory

Metaphor is the main reason for the formation of polysemous terms. The development of the meaning of a word is mostly the result of the use of metaphor. Once a word is produced, language users will use metaphor in most cases to continuously expand and derive its basic meaning.[6] The cognitive basis of metaphor is similarity and human experience. The derivation of polysemous words is mainly based on the cognitive basis of metaphor [3]. The essence of metaphor is to use one kind of thing to understand and experience another kind of thing. It is a kind of system mapping across conceptual domain, from concrete source domain to abstract target domain. If there is no image schema structure consistent with the source domain in the target domain, the characteristics of the source domain cannot be mapped to the target domain. As a noun, ring means (1) a round object (2) a round entity (3) a round symbol (4) a round piece of jewelry (5) a round arena (or arena) (6) gangs. "Circular object" is the core meaning of ring, and all other meanings are expanded on it. Circular solid (item 2) can be connected with the circular jewelry (item 4). Meaning 6 refers to the "small circle or group" formed by specific people. It also has the main characteristics of circular objects (meaning 1) and is a kind of similarity in perception. Therefore, it is also extended by meaning 1 through metaphor.[7] It can be seen that metaphor plays a very important role in the process of polysemy expansion.

2.3 Empirical Cognitive Basis of Meaning Generation in English Morpheme Word-Formation

Cognitive science believes that language is experiential, and the formation of language cannot be separated from the influence of a nation's historical and cultural environment, as well as the interaction between subject and object. The process of meaning generation in English morpheme formation reflects that human cognition usually starts from human body perception and spatial perception, and then extends inward to human mind and outward to external environment. Aitchison believes that metaphor and its directionality are the reason for the realization of the extension of the experience from body perception inward to mind and outward to the external environment. In the metaphorical cognition process of word formation, the concrete body-space experience is often the source cognition domain, while the abstract inner mind and external natural social environment experience are often the target cognition domain. [8]

It is found that people's mental experience is often based on their own physical experience and spatial experience. It maps from concrete and simple cognitive domain to abstract and complex cognitive domain. The combination of body-related roots reflects this rule. When we use the word flat, a literal expression of our physical experience. When it is mapped into the mental realm, it can be a state of mind. Like flatulence. Daniel, you don't inflate. Ceive (variants for cept) has the meaning of seizing and holding. When it extends to the experience in the field of mental world, it means something
related to the thought. "Ceive" (variant cept) can be formed by "conceive", “concept” “Preconception” “misconception” “Perceive” etc. The root words related to the human mind directly reflect the mental experience of people. For example, sci consists of conscious, unconscious, conscience, omniscience, science, Pseudoscience etc. Similarly, people's experience of the external environment outside themselves is also realized through metaphorical cognition based on their own physical experience and spatial experience. External environment includes natural environment and social environment. The two aspects are often intertwined. The word formation associated with body roots reflects this pattern well. For example, the word flat above refers to a physical experience which means blowing through one's mouth and maps to the social sphere which generates the following meanings: conflate; inflate.

Morpheme word-formation enables us to form a lexical network, including many words involving the same word root, as well as many meanings of each word. Analyzing the cognitive rules can help us systematically learn vocabulary so as to draw inferences from one to the other. This process combines the experiential cognitive basis of morpheme word-formation with the metaphor theory to further expand vocabulary.

3. The Enlightenment of English Vocabulary Teaching

3.1 Try to Analyze the Motivation behind its Meaning.

Therefore, from the perspective of cognitive semantics, the teaching emphasis of polysemy is to analyze the motivation behind its meaning. [3] The motivation relationship between polysemous terms is realized by means of radiation and linkage. Items either share a core meaning or have historical coherence in their meaning. For example, a mouse can mean "a kind of animal," "shy, timid person," or "an instrument used for computer." The first is the central sense, and the last two are derivative meanings. Although the latter two meanings are not related on the surface, they both share the core meaning of "mouse". One reflects the timid character of "mouse", while the other reflects the physical characteristics of "mouse". For another example, although the current meaning of candidate does not seem to have much to do with its original meaning, there is a certain historical continuity between the two in the process of semantic development, which is caused by the social and historical changes.

Therefore, when teaching polysemous words, teachers should not be limited to the teaching of a single meaning, but should further explain the rationale between each meaning and strengthen students' understanding of the relationship between polysemous words. In this way, not only the richness and attraction of vocabulary teaching can be enhanced, but also the students' learning patterns can be changed from the memory of single meaning to the memory of "meaning group" with context and meaning, which can improve the efficiency of students' vocabulary memory. In the process of teaching polysemous words, teachers can use the form of semantic structure diagram to show the complex relationship between the development of each meaning, and provide students with intuitive and rich semantic experience with clear semantic development context. In this way, students can not only improve their interest in vocabulary learning, but also deepen their understanding and memory of vocabulary.

3.2 Pay Attention to the Teaching of Basic Category Vocabulary

First of all, from the perspective of the process of understanding the world, the basic categories with typical meanings are the entry point for people to know the world, while language is the symbolic expression of people's knowledge and thinking. Therefore, the basic vocabulary expressing typical meanings is the starting point for people to express their thoughts. Secondly, the basic category vocabulary word form is simple and relatively easy to identify. In the actual communication process, it is the most frequently used. Therefore, teachers should focus on the understanding and practice of the basic category vocabulary. It stresses the implementation of hierarchical English vocabulary teaching. There is no doubt that the understanding of basic category vocabulary lays a solid foundation for further vocabulary learning. Gradually, students are guided to master the vocabulary with complex semantics near the basic category vocabulary. Then, they can strengthen the relationship between the basic category vocabulary and the upper and lower category vocabulary. After that, putting them into a semantic field for teaching is necessary. Let's take the noun category level as an example to experience the hierarchical teaching of vocabulary. The explanation of chair should not be limited to traditional vocabulary teaching. In terms of the extension of the upper and lower category vocabulary of the basic vocabulary category, students should be guided to note that chair is included in the upper category...
vocabulary and furniture is included in the higher level category artifact. Dining-room-chair is the next lexical category of the chair category. In this way, students can form a systematic view of words; Secondly, it can prolong students' vocabulary memory time, and deepen students' vocabulary memory by contacting with old vocabulary when learning new vocabulary. What’s more, it can enhance students' interest in vocabulary learning, and stimulate their motivation to learn vocabulary independently.

3.3 Attach Importance to the Teaching of Prototype Meaning

The archetypal meaning of polysemy is its core meaning. To grasp the core meaning of a polysemy is to grasp its root. For example, the archetypal meaning of open is to go inside a “container.” In open an envelope, open the door, and open a knife, open has its prototype significance. In open an exhibition, open a road, it retains the meaning of making something accessible; In the context of open a discussion, open a debate and open a conference, the meaning of "open" is more abstract. Although the meaning of "open" becomes abstract, we can still find the motivation from its prototype meaning. Since there is such a connection between polysemous words and different meanings, it is often twice the result with half the effort if we can start the meaning around the prototype and memorize the words according to the association.

An effective strategy for learning polysemy is to define the target word in terms of a meaning that spans all meanings, namely its core meaning or archetypal meaning.[9] Therefore, teachers should focus on explaining the prototype meaning of words, attach importance to the explanation of lexical semantics, and enhance students' understanding of the relationship between polysemous words and their meanings. When explaining any other meaning, it should introduce the core meaning first, strengthen the motivation connection between prototype meaning and derived meaning, and cultivate students' ability to memorize words according to association and understand meanings through context, so as to make vocabulary teaching more profound and attractive.

3.4 Attach Importance to the Penetration of Knowledge of Experiential Philosophy, Metaphor and Metonymy

English morpheme word-formation records the cognitive process in which people take themselves as the center and body - space experience as the basis, and map inward to mental domain and outward to external environment, including natural environment and social environment. On the one hand, the experiential cognitive analysis of morpheme word-formation can deepen students' deep understanding of the meaning of words, and at the same time, it can cultivate students' cognitive thinking ability of metaphor and metonymy.

3.5 Pay Attention to the Interlingual Commonalities and Interlingual Differences of Polysemous Words

First of all, polysemy is a common phenomenon among different languages. In the process of recognizing objective things, different ethnic groups happen to have the same cognition of the salient features of the same thing or situation. In addition, due to the differences in cultural environment, language and way of thinking of different nationalities, words in different languages in the world will have different conceptual categories and focus on different things. They can express the same things with different words from other nationalities. In vocabulary learning, cultural comparisons are used to help learners understand the meaning of words, including their specific conceptual and implicit meanings.

4. Conclusion

In English vocabulary teaching in China, when dealing with polysemous words, teachers will either simply introduce the meaning of a word in a specific context, or introduce the common meaning of a word to students at once with no priority. This approach makes it difficult for information to be stored in long-term memory, resulting in poor learning effect. The basic starting point of polysemy teaching from the perspective of cognitive linguistics can provide new enlightenment for polysemy teaching.
References