

A Study of the Vocabulary Teaching Mode Based on Metaphor and Metonymy in Cognitive Linguistics

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[Abstract] Metaphor and metonymy are two effective ways of thinking that belong to the categorization of empirical concepts in the field of cognition. Metaphor realizes the systematic mapping of source domains to target domains by selecting or constructing the similarity between word meanings so that the vocabulary derives new meanings based on the original one; metonymy activates the prominent concept in the same cognitive domain as the reference point through the principle of proximity, obtaining cognition of the new meanings of a word in the form of linkage or connection. Judging from various examples in English, it can be concluded that the development and evolution of word meanings are to some extent governed by the principles of metaphor and metonymy. Therefore, it's of great importance and necessity for teachers in vocabulary teaching to cultivate students' vocabulary association ability, expand vocabulary categories through metaphorical and metonymic cognition, and introduce the relevant cultural connotation, thus building a solid vocabulary knowledge system.

[Keywords] metaphor, metonymy, cognition, vocabulary teaching

Introduction

With the continuous deepening of the reform of college English teaching in China, language researchers and educators have been exploring new teaching concepts and methods in recent decades to improve the teaching effect of English classes. Through innovative ways of teaching, it is hoped that students quickly and thoroughly master language knowledge and, accordingly, acquire the ability to apply English in practical contexts. Vocabulary, as both the foundation of language and the necessary element affecting language ability, is one of the most important tasks of English teaching. Since the traditional vocabulary teaching modes no longer meet the needs of current English learning, the ways of vocabulary teaching based on relevant linguistic theories are adopted to make up for what the traditional ones lack. As cognitive linguistics continues to infiltrate the field of teaching, two common rhetorical techniques, metaphor and metonymy, are included in the cognitive categories. In recent years, a large amount of research on teaching methods related to metaphor and metonymy has also emerged.

This paper combines vocabulary teaching of college English with the metaphorical and metonymic concepts in the cognitive field, aiming to enable students to have a profound understanding of vocabulary through the mastery of linguistic knowledge. First, it elaborates on metaphor in terms of its nature, the mechanism of its formation, and provides examples of application. Second, it introduces metonymy, its definition and the mechanism of its formation, and it summarizes the commonalities and differences between metaphor and metonymy, as well. Finally, it applies these two language phenomena and cognitive tools in the practical vocabulary teaching to explore the applicable teaching methods from the perspectives of cognitive ways of thinking, teaching of polysemy, and cultural connotation.

Elaboration on Metaphor

The Nature of Metaphor

According to cognitive linguists, metaphor is developed based on the similarity of things and the experience of human beings in understanding things. Language users metaphorically process a simple word according to different situations and inadvertently extend the meanings of the word itself. The similarity between two things in metaphor can be reflected in the physical aspect. Linguists appropriately define it as a way to understand and experience one thing with another and as a structural mapping of one concept domain to another.

China has an earlier research history in metaphor. Ancient literary poems can reflect the literati's skillful application and grasp of metaphorical rhetoric. However, it was just after the 1980s that our study of metaphors outside the scope of rhetoric began to systematically be integrated with Western metaphorical theories and with new exploration and understanding of metaphors from the perspective of cognitive linguistics. Representative works in this field in China include Shu Dingfang's *Studies in Metaphor* (2000) and Hu Zhuanglin's *Metaphor and Cognition* (2004).

The Mechanism of its Formation

From the perspective of cognitive linguistics, metaphor is the mapping from source concept to target concept in the conceptual domain. A source concept is a concrete, vivid, and familiar thing or experience, often referred to as a "vehicle" (Leech, 1969), which is an explaining element. The target concept is an abstract and unfamiliar metaphorical element "tenor" (Leech, 1969); that is, an explained element. Metaphor emphasizes the "similarity" and "comparability" between two things, and they are connected through common characteristic elements. It's also maintained that the essence of metaphor lies in an interaction between a metaphorical expression and the context in which it is used (Black, 1962).

The Examples of Metaphor

We can take the classic metaphor examples used between *money* and *time* (Lackoff & Johsnon, 1980; 2003) to illustrate its usage. Before we master the meaning of the word *time* as we do now, we use the original concept of *money* to conceptualize the target concept *time*, using the characteristics of *money* to understand the word *time*, which is much more abstract than *money*. For example: offer/waste/give/spend were all verbs originally used with *money*. Since people find it hard to grasp the abstract concept of *time*, the conceptual connection between *money* and *time* is established through the more familiar language in life, helping us gain a clearer and more specific understanding of the new word *time*. So, we establish links between these two concepts that do not seem to belong together by their very nature, and, therefore, we finally form such expressions as "How do you spend your time?" "I'm running out of my time," "This gadget will save you hours", and so on.

Let's take the word *face* for example. The original meaning of *face* is only a part of our body: 脸部, which is also the most intuitive part of the front and the surface of human body. According to similar connections, we map this natural attribute of *face* to other things to create new understanding and usage. For example: *the face of a book* (书的封皮), *the cliff face* (悬崖面), *the face of a watch* (手表盘). At the same time, through cognitive thinking, people map their basic cognition and experience of *face* to the cognition and understanding of other abstract things. From *face*, we can recognize the appearance on faces by observing the facial expression of a person, and,

therefore, we form such expressions like *an angry face* (生气的样子), *a face of triumph* (一脸成就感). Besides, *face* can also be used to express the outward appearance, like that in the sentence *The face of the city is changing* (城市样貌正在发生变化).

When we conceptualize the word *anger*, we use the metaphorical concept of *container* to map it conceptually, so we understand the abstract expression and the metaphorical application in such sentences: *His anger clearly went deep. Anger welled up in his body* (Ungerer & Schmid, 2008).

In summary, the examples above prove that in the process of the development of human language, we use the meanings that we are familiar with and that have been clearly perceived to map to other conceptual domains, thus continuously expanding and enriching the meanings of words, and, also, explaining the origin of the phenomenon of polysemy.

Elaboration on Metonymy

The Definition of Metonymy

Metonymy is a figure of speech in which one word or phrase is substituted for another with which it's closely associated (Nordquist, 1995), such as "crown" in lands belonging to the crown stands for "royalty." Metonymy is also the rhetorical strategy of describing something indirectly by referring to things around it, as in describing someone's clothing to characterize the individual (Nordquist, 1995), such as The red hat has never been late for the class.

Metonymy involves a relation of "contiguity" between the literal meaning of a word and its figurative counterpart and that one constituent of the metonymic link stands for the other (Ungerer & Schmid, 2008). The stand-for relations in metonymy are in various forms, such as a part for whole, whole for part, material for object, place for event, cause for effect, etc. Let's have a look at the following sentences:

1. *Gray hair should be respected.* (Here *gray hair* is the characteristic of a person and is used to stand for the person.)
2. *He uses his pen to fight for rights.* (Here tools are used to stand for behaviors or acts.)
3. *Wall Street replaces the US financial circle.* (Here places are used to stand for occasions or activities).
4. *He enjoyed the dishes.* (Here the container is used to stand for the content).

In addition to the referential function mentioned above, the prominent attribute is also the condition for metonymy. The highlighting field within the same cognitive model is the working mechanism of metonymy (Chen, 2006).

Commonalities and Differences between Metaphor and Metonymy

Metonymy, like metaphor, is not only a traditional rhetorical device used to modify language, but also a cognitive means. According to the cognitive linguists' points of view, metonymy, together with metaphor, all reflect our human beings' daily ways of thinking. They not only constitute our language, but also shape our thoughts, attitudes, and behaviors, being a tool for people to understand the world. Both metonymy and metaphor are seen as being conceptual in nature, and both can be understood as a mapping process (Lakoff & Turner, 1989). The elements of source concept, target concept, and mapping domain in metaphor can also be applied to metonymy. The difference between them lies in the cognition of the relationship between different things. Metaphors embody "similarity" or "comparative relationship," while metonymy emphasizes a relation of "nearness."

Metaphor creates the relation between its objects, while metonymy presupposes that relation (Bredin, 1984). Metonymy and metaphor also have fundamentally different functions. Metonymy is about referring: a method of naming or identifying something by mentioning something else, which is a component part or symbolically linked. In contrast, a metaphor is about understanding and interpretation: it is a means to understand or explain one phenomenon by describing it in terms of another (Knowles & Moon, 2006).

The Mechanism of Its Formation

We use the mapping domain as a reference to consider whether the use of metonymy is established. The mapping domain enables people to correctly apply metonymy to their expressions by providing an appropriate interpretation of the context. That is to say, different contexts will correspond to different mapping ranges, and there will be differences in the mapping of source concepts to target concepts. Let's make a comparison between these sentences:

1. He promptly ordered all hands on deck.
2. He promptly ordered all heads on deck.
3. We need two smart heads to do the research work.

Here is the application of the part-for-whole metonymy. Hands and heads are traditionally said to be parts of the human body and can be used to represent the whole body or person of the body. When we compare the metonymic effects of Sentences 5 and 6, the focus is on our contextual understanding of the word deck. Deck means the platform of a vessel, which is used in the field of shipping. Then the context of "shipping" provides a reasonable metonymy mapping domain. Loading and unloading in shipping involves labors and porters who need to use their hands to handle the work on deck, just as that in (5), while the word head in (6) has no suitable conceptual connection in the context of deck. Therefore, whether the application of metonymy in language is established should be based on the mapping domain that reflects the context. Then, once we change the context and use the word heads again, it will make the metonymy completely appropriate in (7). In the context of research work, it is natural to use the brain (heads). If we use hands in (7) instead of heads, the mapping of metonymy will not hold.

The Application of Metaphor and Metonymy in Vocabulary Teaching

Cultivating Associated Thinking through Metaphorical and Metonymic Cognition

Vocabulary learning is a multi-dimensional learning process that includes many aspects, such as phonetics, word formation, parts of speech, and meanings of words. In the primary basic stage of vocabulary learning, teachers often emphasize the instilling of words' basic meanings. In the application of vocabulary, they only focus on giving the example sentences matching the words' basic meanings to complete the task of vocabulary teaching. This traditional teaching mode can easily make our students feel bored and tired because there is no positive output and creative thinking process. This kind of word learning is equivalent to the memorization of a single learning mode. Over time, students often lack the enthusiasm for participation in the class, and the teaching effect is accordingly unsatisfactory.

In order to innovate and develop this monotonous and traditional vocabulary teaching mode, we try to apply metaphorical and metonymic theories in cognitive linguistics to vocabulary teaching in college English. On the basis of imparting the basic meaning and usage of vocabulary, this new mode can help students understand the implicit metaphor and metonymy in the

vocabulary by establishing the connection of objects. With the examples of practical language usage provided in class, students will actively think, associate, summarize the semantic scope of the word, thus appreciating the charm of English language and grasping the skills of language application. Through this new learning mode, they can gradually form their self-learning awareness and ability.

Let's take the word head for example. In the traditional way of vocabulary explanation, we basically define it as a body part, while the new vocabulary teaching mode based on cognitive linguistics emphasizes the extension of the meanings. It helps students understand and identify applications of the same word in different contexts. For example, through the phrases head of department, head of a procession, and head of chart, etc., students can discover, recognize, and summarize the conceptualized metaphorical meanings of the word head. It could be "leaders," "front-end," and "top-end," etc. Through the metaphorical function of language, students can make correlation with multiple meanings of the same word.

Polysemy Based on Metaphor and Metonymy

We use the familiar and concrete features of objects in our daily life to describe ones that are abstract and incomprehensible. By this way, we can quickly establish the connection between different things, expanding the meanings of a word with creative thinking. This also reflects the origin of polysemy. Just as the classic description of a linguist has put – "The metaphor of a generation is the regular expression of the next generation." After the basic meaning of the word is normalized, it forms a broader semantic category.

Linguists attribute polysemy to the application of metaphor and metonymy. Understanding cognitive metaphorical concepts can help us better understand and use polysemous words. In the process of teaching, teachers should first start with the prototype meaning of a word and, through the instillation of metaphorical and metonymic concepts, cultivate students' learning and analyzing abilities to make connections with other semantic meanings and establish cognition from the perspective of vocabulary formation. It turns out to be much more effective and helpful to apply this learning method when we teach vocabulary.

Specifically, in the teaching of polysemous words, the teacher mainly plays the role of a guide, assistant, and promoter, while the students should give full play to their main role in study. Teachers should provide students with different contexts based on students' ability to accurately spell words and clarify the basic meanings, consciously inspiring students to understand different meanings in specific contexts by boldly deriving and creating different meanings in addition to the basic ones of vocabulary through cognitive metaphors and metonymy, and to analyze the internal rationale among different meanings of vocabulary. According to the rationale, the teacher explains the evolution of the meanings of the word from the perspective of cognition, constructing a bridge between the meanings and exploring the rules of formation. In order to further strengthen students' mastery and proficiency of the vocabulary, teachers should provide a variety of vocabulary exercises, such as word-filling and word interpretation or English-Chinese translation.

Metaphor utilizes or constructs the similarity between things, mapping the characteristics of a source domain to a target domain and endows the vocabulary with new meanings based on its original one; metonymy uses a relation of contiguity to provide cognitive reference for the formation of new meanings, collaborating with metaphor to enrich meanings of vocabulary, producing the so-called polysemy. It can be seen that the polysemous phenomenon is a dynamic process that is constantly evolving.

Therefore, in English vocabulary teaching, it is imperative for us to change and improve the original pattern of vocabulary learning – spelling and reading, interpretation, example-display and related exercises, helping students to sort out and analyze the relationship between words and meanings, and guiding students to associate, reason, and summarize the rationale of the meanings of words, and then to grasp its principle of construction and development with the completion of the transcendence from language's surface to its deep system. Those are the fundamental procedures of our vocabulary teaching. Only by adding the metaphorical and metonymical ways of thinking and the accordingly rational reasoning into the vocabulary teaching mode can students truly build a complete and solid vocabulary knowledge system, which can effectively expand vocabulary, improve learning, and eventually enhance the vividness and flexibility of language expression.

Cultural Connotation of Lexical Metaphor and Metonymy

As ways of thinking and important cognitive means, metaphor and metonymy in cognitive linguistics are the carriers of language and culture. In the practice of English vocabulary teaching, teachers can give the introduction of the cultural background of words in class, guiding students to understand Chinese and Western cultural connotations and the similarities and differences between their cognitive thinking on language. In our textbook New Horizon College English: Reading and Writing 1, there is such a sentence: "You may be an early bird while your roommate is a night owl!" (Zheng, 2015). We have no difficulties understanding the expressions of "an early bird" and "a night owl" because we have the similar ones in Chinese: 早起的鸟 and 夜猫子. However, when it comes to the classic lines in the movie Forrest Gump: "Life is like a box of chocolates; you never know what you're gonna get." Many people really can't understand what this sentence implies. In fact, the key to understanding it lies in the comprehension of the cultural connotation of a box of chocolate. Most people who have been exposed to Western culture know that the boxed chocolates sold in Western countries contain chocolates of various shapes, flavors, and colors. So the chocolate that Gump mentioned is actually a metaphor for a variety of different choices and outcomes. In addition, metonymy develops within a socially sanctioned scope, which corresponds to a cognitive model (Ungerer & Schmid, 2008).

For example, in the sentence "The White House has launched a tax-cutting campaign," we need to have a basic understanding of American political culture to comprehend the metonymy of White House. So, with the notion of tax-cutting, the place concept White House naturally suggests a link with President (Ungerer & Schmid, 2008). From the examples shown above, we need to note that people of different cultural background can understand the same concept in quite different ways. Teachers should excel in guiding students to thoroughly master English background and culture in vocabulary teaching with the aim of avoiding cultural misunderstandings and conflicts and eventually enabling students to gain a deeper understanding of the cultural connotation of English through an exhaustive contrast between Chinese and Western culture.

Conclusion

The new way of vocabulary teaching laid on cognitive metaphor and metonymy theories makes up for the deficiency of our traditional vocabulary teaching mode. It opens up a new way to systematically learn words and broadens the field and perspective of vocabulary research. The extension and deepening of vocabulary research further proves the theories of cognitive metaphor and metonymy. The application of metaphor and metonymy theories transforms the boring memorizing in the past into an active input based on fully understanding and, at the same time,

enhances the self-confidence and internal motivation of English learners. Therefore, it is conducive to constructing their ability to logically extend the meanings of words. The analysis conducted in this paper, on one hand, can deepen the understanding of cognitive functions of metaphor and metonymy in vocabulary's extended meanings, and on the other hand, can promote students' cognitive thinking. Under such a teaching mode, our students can master effective methods of learning words, expanding their vocabulary, enhancing their capability of language output, enriching language expression, and improving their comprehensive ability to flexibly use language.

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