The Application of Prototype Category Theory in College English Teaching

Bo Gao
Foreign Language Department
Jilin Institute of Chemical Technology
Jilin, China

Abstract—**Prototype category theory is one of the theoretical foundations of cognitive linguistics. As a new concept construction model, it provides a new perspective for language research and teaching, and constructs a new theoretical platform for foreign language teaching. Since the end of the last century, prototype category theory has also been favored by Chinese scholars. This paper introduces prototype category theory and mainly analyzes the application of this theory in English teaching, including vocabulary teaching and writing teaching. This paper aims to promote the organic combination of prototype theory and language teaching practice, and further improve the effectiveness of language classroom teaching.**

Keywords—prototype category theory; English teaching; vocabulary; writing

I. INTRODUCTION

Prototype category theory was established in the 1970s by the American psychologist Eleanor Rosch. This theory was later widely used in various fields of linguistics. The emergence of each new linguistic theory is accompanied by the application of its theory. As a very important theory in the field of cognitive linguistics, prototype category theory has important guiding significance for language learning and research. The role of prototype category theory in interpretation has been widely recognized in academic world. It has come as a result that semanticians and many educators have gradually applied prototype category theory in English teaching, which makes the theory work get a greater degree of play and combine the theory and practice together. At present, the application in domestic English teaching is mainly reflected in the following aspects: the application of prototype category theory in English vocabulary memory, English writing and so on.

II. THE COMBINATION OF PROTOTYPE CATEGORY THEORY AND ENGLISH TEACHING

We will briefly introduce the application of prototype category theory in English teaching from the aspects of vocabulary teaching and writing teaching in college English.

A. The Application of Prototype Category Theory in English Vocabulary Teaching

In human cognition, the basic category is the most typical prototype category, and prototype category is best represented in the basic level category. Therefore, the basic category with prototype features is a favorable tool for people to categorize world things. The upper categories are parasitic on basic category, because they rely on basic category to obtain gestalt and most of the attributes. The upper category has two functions. First, it highlights the obvious common attributes of its members. The second is the aggregation function, which means that the lower category constitutes the higher-level category. The upper category sets the common attributes of subordinate category members. This process is repeated several times to form the category hierarchy. At the same time of the formation of the category, a vocabulary category has formed, which determines the order of the formation and development of vocabulary and constitutes a certain lexical level structure, and its basic level has a special status.At the language level, upper category vocabulary and lower category vocabulary are generally formed later than category vocabulary. The basic category vocabulary plays an important role in the process of developing the vocabulary from the basic vocabulary to higher and lower category vocabularies. First of all, the basic category vocabulary is mostly non-analyzable native words with simple syllables and less syllables. Its composition has greater arbitrariness. Therefore, the basic category words are neutral words and have the highest frequency of use. In addition, basic category words have the strongest ability to form words. Although the number of basic words is limited and generally fixed, the number of the non-basic level words which are formed by synthetic methods are infinite. In addition, the basic category vocabulary develops more metaphorical and metonymy meanings as expanding outward from the basic meanings (generally prototype). Taking animal as an example, basic vocabulary such as "dog, lion, wolf, fox" are more metaphorical than "animal". It can be seen that basic vocabulary plays an important role in English vocabulary teaching.

Rosch (1976) pointed out that children first learn basic vocabulary and usually use these basic words to refer to specific objects. Brown (1958) concluded in a study that in daily communication, people tend to use the most convenient method to refer to objects, that is, use their basic terms instead

of using more complex forms. Some language researchers have found that the level of English learners' ability increases as the number of basic vocabulary they learn increases. Therefore, teachers should give priority to the teaching of basic words in vocabulary teaching, give full play to the role of basic words, and put the teaching of basic words on the first place in vocabulary teaching. First of all, we must start with teaching materials, which means that the preparation of teaching materials must comply with these basic principles. The selection of articles should not only pay attention to the diversity of the subject matter, but also to the neutrality of the register. In particular, the vocabulary in the article should reflect the basic level of vocabulary and appropriately take into account the upper and lower vocabulary, which can provide teachers with the basic conditions of vocabulary teaching in line with cognitive law. Second, in teaching process, teachers should focus on the typical meaning of vocabulary, whether it is the basic level vocabulary or the upper and lower level vocabulary. Therefore, the treatment of vocabulary with marginal meaning is an important part of vocabulary teaching. It is not enough for students to learn the marginal meaning of vocabulary. It is absolutely necessary to supplement their typical meaning because the typical meaning of a word best reflects the most commonly used meaning, that is, the meaning to be learned first. Taking the energy to master the basic vocabulary is of great benefit to the learners' speaking, reading, listening and writing.

B. The Application of Prototype Category Theory in English Writing Teaching

There are great differences in syntax and structure between English and Chinese. For example, English nouns have singular and plural forms; English verbs have multiple tenses (one of the prototype features of verbs). Chinese is just the opposite: Chinese nouns do not have singular or plural forms; verbs have no tense. Due to the differences in language and culture, users of English and Chinese have different models of cognitive prototype in many ways. The strong nature of the mother tongue makes Chinese students accustom to apply the unique cognitive prototype of Chinese directly to English, thus forming a cognitive prototype transfer. If the prototype features of two languages are identical or similar, a positive transfer is often formed, but otherwise the syntactic acquisition is hindered. There are usually the following types of errors in the articles of the undergraduate students of the author:

1) Verb tense: The verb tense is one of the prototype features of English verbs, while Chinese verbs have no similar features. This difference in cognitive prototype makes it very easy for Chinese students to transfer the prototype of Chinese verbs directly into English, resulting in a negative transfer of mother tongue. This is also the reason why such errors occur frequently. In the output process, students often ignore the requirement that the tense unity of the whole article or the whole sentence.

2) Singular and plural nouns: Chinese nouns do not have singular or plural forms. When students use English, they often copy and apply Chinese noun prototypes directly. They ignore the feature that English noun categories have singular and plural forms, which results in frequent occurrence of such errors.

3) Subject-verb agreement: This feature is one of the typical features of English verbs, and Chinese does not have this feature. Chinese students often do not consider this feature of verbs, and there will be a phenomenon of inconsistent use of subject-verb.

4) Article: Chinese has no articles. The use of indefinite articles is different from that of English. For example, Chinese has no noun with the beginning of a vowel, so there is no "an" role. These cognitive differences induce errors.

In view of the negative influence of English and Chinese grammatical prototype differences on English learning and application, teachers should pay attention to the comparison of the syntactic structures and forms of the two languages, cultivate students' cognitive model of English prototypical features and improve the validity of English teaching.

III. CONCLUSION

Prototype category theory has a good interpretation of cognitive activities at all levels of language. Using archetype theory, we can analyze the categorical phenomena of grammar, as well as analyze the phenomenon of categories such as semantics, phonemes, syntax, and concepts. This is why cognitive linguistics has received increasing attention in the linguistic world in recent years. The combination of prototype category theory and English teaching has great practical value for English teaching practice. This paper analyzes the application of prototype category theory in English teaching from two aspects−vocabulary teaching and writing teaching. Prototype category theory makes up for the shortcomings and deficiencies of traditional category theory in terms of paraphrase. It is a concept of meaning which is completely different from traditional semantic theory. For this reason, teachers should consciously apply prototype category theory in English teaching to improve students' language learning ability. At the same time, we should also see that, as an emerging semantic analysis theory, prototype category theory still faces many problems, and it needs to be further studied so that this theory can play a greater role in the study of language teaching.

REFERENCES

[1] Cao Qiaozhen. Experimental Research on the Application of Prototype Category Theory in Multi-sense Teaching[J]. Shandong Foreign Language Teaching, 2010.

[2] Lakeoff, G & Johnson. Metaphor We Live By[M]. Chicago: The University of Chicago Press, 1980.

[3] Li Ying. Categorization and English Writing: An Analysis of Lexical Expressions in English Writing from the Perspective of Cognitive Categories[J]. Journal of Xihua University: Philosophy and Social Sciences, 2006.

[4] Li Yuan. The Application of Prototype Theory in English Learning and Teaching[J]. Friends of Science, 2009.

[5] Mao Xia. Archetype Category Theory and English Vocabulary Teaching[J]. Educational Time and Space, 2010.

[6] Zhao Yanfang. An Introduction to Cognitive Linguistics[M]. Shanghai Foreign Language Education Press, 2005.