

## Bridging Philosophy of Language and Language Learning: From Family Resemblance to the Prototype Theory

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## Abstract

Based on detailed interpretation of Wittgenstein's family resemblance theory and elaboration of the prototype theory which is developed from the former, this article investigates the developmental path of "family resemblance—prototype theory—applied cognitive linguistics" with an attempt to explore the possibility of bridging philosophical theories and language learning practice. In the last part of the article, prototype-based pedagogy is suggested so as to promote second language learning.

**Key words:** Philosophy of language; Family resemblance; Prototype theory; Language learning; Applied cognitive linguistics

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**1. INTRODUCTION** 

Recognized by some as the greatest philosopher of 20<sup>th</sup> century, Ludwig Wittgenstein occupies a unique place in

the 20<sup>th</sup>-century analytic philosophy. He played a central, (or, controversial) role in the specializations he primarily worked in-logic, the philosophy of mathematics, the philosophy of mind, and the philosophy of language. Wittgenstein's philosophy is often divided into an early period and a later one. His early thought is exemplified by Tractatus Logico-Philosophicus, which is the only booklength philosophical work published in his lifetime. The later Wittgenstein, mostly recognized in the Philosophical *Investigations*, the notable posthumously published work, made radical criticisms on all of traditional philosophy, and also rejected the ideas in his own early work. Radical and controversial as Philosophical Investigations is, its significance on philosophy is great, and the insights of Wittgenstein are profound. One of the core concepts in the work-"family resemblance" has influenced philosophical thought in diverse topics. It goes far beyond logic and mind, and continues to influence ethics, religion, aesthetics, culture, etc. In particular, the concept of family resemblance has exerted great influence on linguisticsleading to the formulation of the prototype theory, and which in turn has constituted the cornerstone of cognitive linguistics.

The aim of this essay is to expound Wittgenstein's idea of family resemblance, its features and principles. And then follows the introduction of the prototype theory which is inspired by the concept of family resemblance. Finally the article will end with the discussion of what the implication of the theory is and how to apply it to language learning.

#### 2. FAMILY RESEMBLANCE

Family resemblance is a concept appearing frequently in Wittgenstein's works—first in *The Blue Book* and later in *Philosophical Investigations*. It is not Wittgenstein who first proposed the idea—it is suggested that Friedrich Nietzsche had been using this concept, together with many other 19<sup>th</sup>-century philologists, but Wittgenstein made the idea of family resemblance (or Familienhnälickeit in German)popular. Family resemblance is one of the mostfrequently-discussed concepts in the later Wittgenstein's philosophy. To understand what this concept is, we have to start with another important term—language-games, as family resemblance is often interwoven with it.

#### 2.1 Language-Games

The first occurrence of the term *language-game* is in *The Blue Book*, where language-games are regarded as "the primitive forms of language". Then the term appears again and again in *Philosophical Investigations*(abbreviated as PI in the rest of the article) (Wittgenstein,1953). Examples of language-games are given in many passages in PI as seen in the following.

Wittgenstein begins with a quotation from St. Augustine's *Confession* (PI§1), which is an example of how words are learned by ostension:

When grown-ups named some object and at the same time turned towards it, I perceived this, and I grasped that the thing was signified by the sound they uttered, since they meant to point *it* out. This, however, I gathered from their gestures, the natural language of all peoples, the language that by means of facial expression and the play of eyes, of the movements of the limbs and the tone of voice, indicates the affections of the soul when it desires, or clings to, or rejects, or recoils from, something. In this way, little by little, I learnt to understand what things the words, which I heard uttered in their respective places in various sentences, signified. And once I got my tongue around these signs, I used them to express my wishes.

In PI§2, Wittgenstein writes,

Let us imagine a language for which the description given by Augustine is right: the language is meant to serve for communication between a builder A and an assistant B. A is building with building stones: there are blocks, pillars, slabs and beams. B has to pass him the stones and to do so in the order in which A needs them. For this purpose they make use of a language consisting of the words "block", "pillar", "slab", "beam". A calls them out; B brings the stone which he has learnt to bring at such-and-such a call. — Conceive of this as a complete primitive language.

In PI§48,

Let us apply the method of §2 to the account in the *Theaetetus*. Consider a language-game for which this account is really valid. The language serves to represent combinations of colored squares on a surface. The squares form a chessboard-like complex. There are red, green, white and black squares. The words of the language are(correspondingly) "R", "G", "W", "B", and a sentence is a sequence of these words. Such sequences describe an arrangement of squares in the order...And so, for instance, the sentence "RRBGGGRWW" describes an arrangement of this sort...

In PI§632,

I do not want to say that in the case of the expression of intention "I am going to take two powders" the prediction is a cause –and its fulfilment the effect. (Perhaps a physiological investigation could determine this.) So much, however, is true: we can often predict a man's actions from his expression of a decision. An important language-game.

#### In PI§7,

In the practice of the use of language (2) one party calls out the words, the other acts on them. However, in instruction in the language the following process will occur: the learner *names* the objects; that is, he utters the word when the teacher points at the stone. – Indeed, there will be an even simpler exercise: the pupil repeats the words after the teacher— both of these being speech-like processes....

And the processes of naming the stones and of repeating words after someone might also be called language-games. Think of certain uses that are made of words in games like ringa-ring-a-roses.

As described above, language-games are of various forms. Ostension, or learning words by pointing out the object, is a form of language-game (PI§1); the activity of the builder and his assistant is a language-game of orders(PI§2), and so is the linguistic procedure of names for colors on a grid(PI§48). Language-games can be as simple as repeating words after the teacher or naming the stone which the teacher points to(PI§7), or having more complex processes of combination of language and actions that are typical cause-and-effect. And Wittgenstein even provides an astonishing long list of language-games in PI§23.

Consider the variety of language-games in the following examples, and in others: Giving orders, and acting on them-Describing an object by its appearance, or by its measurements-Constructing an object from a description (a drawing)-Reporting an event-Speculating about the event-Forming and testing a hypothesis-Presenting the results of an experiment in tables and diagrams-Making up a story; and reading one-Acting in a play-Singing rounds-Guessing riddles-Cracking a joke; telling one-Solving a problem in applied arithmetic-Translating from one language into another-Requesting, thanking, cursing, greeting, praying.

Seeing these specific examples, readers may ask, "Then what is the definition of a language-game?" To their disappointment, Wittgenstein does not give any exact definition of language-games throughout the whole book, though he does suggest some more general features of a language-game. He remarks as follows:

We can also think of the whole process of using words in (2) as one of those games by means of which children learn their native language. I will call these games "*language-games*" and

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will sometimes speak of a primitive language as a languagegame. And the processes of naming the stones and of repeating words after someone might also be called language-games. ... I shall also call the whole, consisting of language and the activities into which it is woven, a "language-game" (PI§7).

The description entails some key words or important expressions for Wittgenstein's language-games-"the process of using words", "means of learning their native language", "a primitive language", "consisting of language and the activities", "language is woven into activities". Based on that, it may be safe for us to infer these: a language-game is the process of using words, is the means for children to learn their native language, primitive languages are the elements constituting the language-game, the whole of a language-game consists of language and activities, and the activities are connected with language so closely that they are "woven into" the language. However, these descriptions still do not suffice for constructing a definition of language-games, for they do not offer the account of the essence of language-games. Wittgenstein(1953) raises the problem with the mouth of an imaginary accuser:

You make things easy for yourself! You talk about all sorts of language-games, but have nowhere said what is essential to a language-game, and so to language: what is common to all these activities, and makes them into language or parts of language. So you let yourself off the very part of the investigation that once gave you the most headache, the part about the *general* form of the proposition and of language.

Then what is the essence of language-games, or games? Is it the character of being rule-governed? But different games have different rules, and not every game has strict and definite systems of rules. Sometimes we make rules when playing games. Is being entertaining the essence? Wittgenstein argues that not all games are "amusing". Therefore we cannot see something that is common to all games. In other words, it is impossible and unnecessary to give an exact and essential definition for language-games. To explain to someone what a game is, we just need to provide examples for him. "we'd describe games to him, and we might add to the description: 'This and similar things are called games."" (PI§69)Wittgenstein thinks that there is no boundary for the concept of games. But even if games are without boundaries, we still know what a game is, just like we know what the description "The ground was quite covered with plants" is about, though we are not given the definition of *a plant*.

Some people may raise such doubts as "since languagegames do not possess a character shared by all of them, why do you apply the name 'language-games' to these activities". The following can be regarded as Wittgenstein's response(PI§65):

Instead of pointing out something common to all that we call language, I'm saying that these phenomena have no one thing in common in virtue of which we use the same word for all--but there are many different kinds of *affinity* between them. And on account of this affinity, or these affinities, we call them all "languages".

Wittgenstein argues that it is not because of share property that we call them "language", rather, it is in virtue of the *affinities*. "Affinity" is different from essence, and is not a character possessed by all members. To clarify what it is, Wittgenstein proceeds to introduce a term which can better describe the property of a family family resemblance. That is what we will discuss in the next section.

#### 2.2 Family Resemblance

In PI§66, Wittgenstein has been talking about games, and he notices that as he moves from one game to another, for example, from card games to board games to ball games, he cannot find anything common to them all. Instead, he finds a network of resemblances. It is "a complicated network of similarities overlapping and criss-crossing: similarities in the large and in the small"(PI§66).

Then the term "family resemblance" appears: "I can think of no better expression to characterize these similarities than 'family resemblances'; for the various resemblances between members of a family--build, features, colour of eyes, gait, temperament, and so on and so forth--overlap and criss-cross in the same way. And I shall say: 'games' form a family." (PI§67) Here Wittgenstein makes an analogy with "family", to exemplify what the family resemblance is. His point is that there is no one essential common feature for all family members, but a series of "overlapping" similarities, and on the ground of that, they form a "family". These overlapping features among family members are what Wittgenstein calls "family resemblances". Maybe this is a simpler and clearer way to interpret "family resemblances". A, B, C and D are members in a family. A resembles B in their noses, B resembles C in their eyebrows, and C resembles D in the gait. But there is no similarities between A and C, or B and D, or A and D, and so on. "...if you look at them, you won't see something that is common to all, but similarities, affinities, and a whole series of them at that" (PI§66), as says by Wittgenstein. And these similarities are their "affinities". The family members do not share any essential common feature though, they form a family on account of "affinities"--those overlapping and criss-crossing similarities.

Wittgenstein also employs the metaphor of thread to clarify the concept. Here family resemblances are compared to fibre, and thread is the whole family. "[I] n spinning a thread we twist fibre on fibre. And the strength of the thread resides not in the fact that one fibre runs through its whole length, but in the overlapping of many fibres." (PI§67) There is no one common feature to the whole family, like no one fibre runs through the whole thread from the beginning to the end. But just as many overlapping fibres form the thread, the overlapping similarities connect the family members and thus make into a whole family. This network of overlapping and criss-crossing similarities is called by the name "family resemblance".

According to Wittgenstein, "games" also possess the feature of family resemblance. He raises a question about games in PI: "Consider, for example, the activities that we call 'games'. I mean board-games, card-games, ball-games, athletic games, and so on. What is common to them all?" (PI§67) And immediately he provides an the answer "you won't see something that is common to *all*". Next Wittgenstein goes to great lengths to prove his point with examples of various games:

Look, for example, at board-games, with their various affinities. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost .-- Are they all 'entertaining'? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball-games, there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck, and at the difference between skill in chess and skill in tennis. Think now of singing and dancing games; here we have the element of entertainment, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way, can see how similarities crop up and disappear. (PI§67)

What is the common feature of all the games? The element of entertainment? Having winning and losing? Or skill and luck? As we move from one game to another, we find that some groups of games may share some feature, yet such a feature disappear in some other groups. In effect, we cannot find one essential element that is shared by all of the games. In other words, there does not exist such a thing as the essence of all games. Games are connected by similarities or resemblances, not by a unified common feature. Family resemblance is a relation among family members. It is the on the basis of resemblance that the family of "games" are formed.

Apart from games, Wittgenstein also lists other concepts which have the feature of family resemblance, such as numbers, words, sentences, knowing and saying, shades of colors, and language of course.

Another point made by Wittgenstein is that there are no clear-cut boundaries for family members. That is, vagueness is a character for the concepts with the feature of family resemblance. "Games", again are taken as examples to demonstrate this assumption. He argues, "how is the concept of a game bounded? What still counts as a game, and what no longer does? Can you say where the boundaries are? No. You can *draw* some, for there aren't any drawn yet. (But this never bothered you before when you used the word "game".) (PI§68) The concept of games is vague, we cannot define games exactly, for there are no sharp boundaries for games. Or we may say "games" is not a close concept, and openness is its character.

After providing his proposition, Wittgenstein imagines someone might doubt, "But is a blurred concept a concept at all?" (PI§71)If the boundaries for a concept are blurred, can you say it is a concept? Wittgenstein uses an analogy of a picture to demonstrate his argument. "Is a photograph that is not sharp a picture of a person at all? Is it even always an advantage to replace a picture that is not sharp by one that is? Isn't one that isn't sharp often just what we need?" He argues that we often need a picture that is not sharp. Then he goes on to refute Frege's argument, who Frege "compares a concept to a region, and says that a region without clear boundaries can't be called a region at all". Wittgenstein responses that "But is it senseless to say 'Stay roughly here'? Imagine that I were standing with someone in a city square and said that. As I say it, I do not bother drawing any boundary, but just make a pointing gesture a as if I were indicating a particular spot." (PI§71) He suggests that in ordinary language use, or in languagegames, we need not draw clear-cut boundary for people to understand the sense of a sentence. Just as I cannot give the exact definition of a plant, but I can understand the meaning of the sentence "The ground was quite covered with plants" (PI§70). Exactness is not the necessary condition for understanding. Family resemblance concepts like language, words, sentences, games, or shades of color are vague and blurred, without sharp boundaries.

Based on the above discussion, we can summarize the characters for the concepts of language-games and family resemblance. First, as a "form of life", language-games are activities involving language learning, or language use in ordinary life. Second, language-games are indefinable. Like games, it is impossible to give language-games an exact definition. We can understand what a game is only through examples and description. That we cannot define a game is because there is no one essential feature for all the language-games. Therefore we reach the third character of language-games -- the anti-essentialist property. That is, in spite of the various forms of language-games, we cannot find one significant, or essential feature that is common to all of them. There are only overlapping and criss-crossing similarities among games. The family of languagegames is formulated on the basis of these similarities. Such overlapping similarities are what we call "family resemblance". Family resemblances are what tie the members of language-games together.

For the concept of family resemblance, we conclude the following characters based on Wittgenstein's account. First and foremost, the concept of family resemblance is a departure from traditional essentialism. Traditional philosophers have an intuitive tendency for uniformity in a concept, "craving for generality" as in Wittgenstein's words. They believe a concept should extract the essential property which is shared by all members of it. However, family resemblance is different from the traditional view on concepts. Family resemblance is not a property common to all the members, it is a network of overlapping similarities. There is no essential feature for the family. Next, the concepts with the feature of family resemblance entail numbers, words, sentences, knowing and saying, shades of colors, language and so on. Another character is that the concepts with family resemblance are vague, and they need not to be exact. There need not be clear-cut boundaries for the members of a family.

The concept of family resemblance is a breakthrough, or even a revolution to the traditional philosophy, and it gives inspiration for other researchers. On the foundation laid by Wittgenstein's family resemblance, and with the efforts made by Berlin & Kay, Rosch, Labov, Lakoff, Langacker, Taylor, etc., dozens of years later a powerful linguistic theory is developed— the prototype theory, which we will deal with in the next section.

# 3. THE CLASSICAL THEORY OF CATEGORY VERSUS THE PROTOTYPE THEORY

Categorization is a fundamental cognitive way for human, by which they classify the objects around them into categories, thus gaining knowledge about the world. Categories are the products of categorization, and categorization is the approach to form categories. As human divide the things around the world, they capture the general attributes of objects, and make the objects with common or similar attributes into groups or collections—categories, and by way of that, concepts are constituted. On the basis of concept constitution people obtain knowledge about the world. So we may say that categorization plays an important role in concept formation, and it is the starting point of human cognition.

Many studies on category were conducted even as early as over 2000 years ago when Aristotle elaborated it as a philosophical concept. And studies on category are still popular today in such research fields as psychology, linguistics or others. Throughout the history of category study, two approaches or theories have taken important position—the Classical Theory and the Prototype Theory. As the latter is the opposition to the former, so to understand what the Prototype Theory is, we will start with a brief introduction of the Classical Theory of category.

#### 3.1 The Classical Theory of Category

The classical theory of category can be traced back to Greek antiquity, which has dominated the long period beginning from Aristotle and ending by Wittgenstein. It is commonly acknowledged that Aristotle is the first one who studies category systematically. According to Aristotle, a category is a collection of elements which possess a common feature or property, i.e. a category can be defined by a cluster of features or a set of necessary and sufficient conditions. Categories have the following four features:

• Categories are defined in terms of conjunction of necessary and sufficient feature;

- Features are binary;
- Categories have clear boundaries;
- All members of a category have equal status.

The classical theory of category can be used to explain certain concepts in the real world, and many concepts in the natural science such as mathematics, logics, physics, chemistry, possess binary features. Taking the number "1" as an example, it is either an odd number or not an odd number.

The classical theory used to play a dominant role in the 20<sup>th</sup>-century linguistics. Phonology, syntax, semantics employ the binary approach. For example, in phonology, a phoneme has a binary feature of [ $\pm$ VOCLIC], as it is either a vowel [+VOCLIC] or a consonant [-VOCLIC]. In syntax, a sentence(clause) is first divided into two part of NP and VP, and then each part is divided again into two smaller parts, which embodies the binary way of syntactic analysis. In semantics, Componential Analysis is established on the basis of the binary approach, with which MAN is analysed by [+HUMAN, +ADULT, +MALE].

#### 3.2 The Prototype Theory

Although the classical theory of category once played a significant role in linguistics, it is challenged by Wittgenstein's theory of family resemblance. Wittgenstein's theory of family resemblance, which is a total denial of the classical theory on category, is considered as the foundation of the prototype theory.

After examining various games, Wittgenstein finds that the category of games is not linked by an essential feature that is common to all of them. Different games are connected to a category by overlapping similarities, just like family members are connected by affinities. Wittgenstein calls these similarities by the name "family resemblances". As Wittgenstein's theory of family resemblances has been expounded lengthily in the previous section, here we just conclude its main points to see how it contradicts with the classical theory: 1. Categories are not defined in terms of a conjunction of necessary and sufficient features, that is, the members of a category do not have a common essential feature, rather, they have overlapping similarities; 2. The boundaries for a category are not clear; 3. Binary approach is not applicable for some marginal members of a category, for they may contain properties of a neighboring category. By and large, the assumption of family resemblance is a

complete opposition to the classical category theory.

As family resemblance can explain the features of natural categories without clear-cut boundaries, it catches some scholars' attention in the late 60s and 70s of the 20<sup>th</sup> century. Inspired by the concept of family resemblance, researchers make many further studies, and gradually develop an important theory of cognitive linguistics called the prototype theory.

The prototype theory is formulated mainly on the basis of the empirical studies. The famous studies include Berlin & Kay's study (1969) on the color words, which is testifies later by a series of experiments by Rosch (1973,1975, 1978), Labov's study (1973) on CUP and BOWL, and Rosch's other studies which extend the research range to some natural categories such as "bird", "fruit", "furniture", "vegetable" and others.

After Berlin and Kay (1969) conduct an comprehensive investigation on the color words across 98 languages, they propose two famous concepts—Focal Colors and Implicational Hierarchy of Basic Colors. The study finds that: the focal, or basic colors are similar in different languages; the boundaries for a color category are fuzzy; in a language, the statues of the color words are unequal, with central members and peripheral members; the selection of the focal color words for a language follows an "implicational hierarchy", i.e. WHITE/BLACK— RED—GREEN/YELLOW/BLUE —BROWN— PU RPLE /PINK /O RAN GE /GREY; the focal color words are acquired earlier than other peripheral color words.

Based on the findings of Berlin and Kay's study, Rosch and her collaborators also conduct a series of experiments on colors. The research by Rosch et. al. confirms the results of Berlin & Kay's study, indicating that the focal color is the best representation of the color category and hold the most important status. Rosch suggests to use the term "prototype" to replace "focal". The prototype is the most typical, or salient representation in a category, and prototype is regarded as the best example for judging other members in a category. The prototype effect is found in many categories other than colors, when Rosch and her colleagues enlarge the research range to other categories such as "bird", "fruit", "furniture", "vegetable", etc. Rosch becomes the one who has made the greatest contribution to the prototype theory.

Another researcher Labov studies the categorization of the household receptacles like vases, bowls, cups, mugs. His experiment also demonstrates that the boundaries for the categories are not clear, there is no dividing line between the category of cups and bowls, only one merges gradually into the other.

Summing up the findings of the proceeding studies, we may conclude the following assumptions of the prototype theory.

• The category membership is not defined by fulfilling a set of necessary and (jointly) sufficient conditions,

rather the category members are linked by the family resemblance.

• The features for category members are not binary. There is no an essential common feature for all the members, but overlapping similarities connecting them.

• The boundaries for categories are fuzzy, without clear dividing line between one category and another. A category and its neighboring one may have some overlapping attributes.

• The status for category members is not equal, with the central members and peripheral ones. A prototype is the central member which is the most typical and salient representation of the category. The prototype has the most common attributes, and peripheral members have less.

Prototype effects not only exist in the natural concepts in daily life, but are also pervasive in language structures such as vocabulary meanings, grammar structures and so on. For instance, when explaining meanings of polysemy, prototype theory can do better than the traditional semantic analysis. The semantic category of a polysemous word cannot be defined in terms of common attributes, but is connected by family resemblances. The various meanings of the word form a semantic network by the overlapping attributes between the meanings. The semantic network is a linear semantic chain, or a "radial" category as called by Lakoff(1987), or a composite network of both types, depending on the relations among the meanings of the word. While a linear semantic chain adopts the pattern of "AB-BC-CD-DE" as mentioned before, in a radial category the peripheral meanings and the central meaning(the prototype) constitute a radial network, with the prototypical meaning positing at the center, surrounded by peripheral meanings which derive from the central meaning by means of two cognitive processes-metaphor and metonymy. In addition to semantics, the prototype theory is further developed by researchers in other fields of linguistics, like phonology, morphology, syntax and grammar.

## 4. IMPLICATIONS AND SUGGESTIONS

Apart from theoretical studies, in practice, the prototype theory has been applied in Second Language Acquisition and language teaching since the late 20<sup>th</sup> century. In spite of some rewarding findings, the relative research in China mostly concentrates on English vocabulary teaching, in particular, the teaching of polysemy. Actually, the application of the prototype theory should not be confined to the vocabulary teaching. With respect to the application of the prototype theory in teaching practice, I will make the following suggestions. First, the theory can also be employed in grammar teaching, in order to overcome some difficulties in the English learning for Chinese students. Every grammar structure (or construction as called by cognitive linguistics) can be regarded as a category, where the most typical, or core grammar rule is grasped rapidly while the peripheral grammar rules are less easy to learn. Nevertheless, the peripheral grammar(or the exceptions) is often where the learning difficulty lies. The traditional method of teaching grammar, by which grammar is learned by "rules+exceptions" and by memorizing the grammatical rules, proves to be fruitless (Wen, 2013). In the pedagogy based on the prototype theory, on the other hand, the teacher will point out the association between the core grammar and the peripheral one, aiding students to understand and memorize in a more effective way as this method will be more consistent with human cognition of categorization. Besides application in grammar teaching, the prototype theory may be used in the contrastive analysis between the second language and the native one. People speaking different languages possess different cognitive and conceptualization systems. As second language learners learn a second language on the basis of the conceptualization and categorization system of his first language, the latter will definitely influence the learning of the former. Such influence between a second and the first languages is called language transfer. If the influence can facilitate learning, it is positive transfer; if it hinders the learning, it is negative transfer. By making contrastive analysis between the first and second languages, we may increase positive transfer and reduce negative transfer. Traditional contrastive analysis mainly concentrates on the forms of language, thus is less effective. In contrast to that, the new approach of contrastive analysis which is based on the prototype theory, will focus on the comparison and contrast of concepts/categories of the languages. This is a *conceptual* contrastive analysis. We can make the contrastive analysis at all levels of language, the lexical, syntactic, and grammatical or discourse levels. For instance, we may differentiate the semantic categories of the English word "paper" and Chinese "纸", or compare the marked character of the English tense and the unmarkedness of the Chinese tense, etc. Finally, it is suggested to extend the application of the prototype theory to the teaching of the foreign languages other than English, as domestic research is largely on English and seldom deals with other languages.

The application studies of the prototype theory home and abroad have indicated that prototypebased pedagogy can promote the learning of a second language. Based on the abundant theoretical studies of cognitive linguistics and empirical research of language acquisition, very recently a new discipline called applied cognitive linguistics has emerged. In the establishment of applied cognitive linguistics, the prototype theory, as one of the fundamental theories for cognitive linguistics, evidently has played an important role. And trace back more to the source of the prototype theory, we will find the essential foundation laid down by Wittgenstein's family resemblance theory. Thus by investigating the developmental path of "family resemblance-prototype theory-applied cognitive linguistics", we have witnessed the great significance of philosophy of language, both theoretical and practical, and this investigation in turn provides us much implication on bridging philosophical theories and language learning practice.

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