

Metonymy Research in Cognitive Linguistics*

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Centuries of rhetorical and literary studies have strongly been influencing the cognitive understanding of metonymy. Many different classifications of tropes have been proposed. Some subsume metonymy and synecdoche under metaphor while the other classify it under synecdoche. The paper overviews the main researches on metonymy in west countries and in China since 1980s from cognitive perspective.

Keywords: Metonymy, Rhetorical, Trope, Cognitive

Introduction

Metonymy is a cognitive and linguistic process through which we use one thing to refer to another and has primarily a referential function, that is, it allows us to use one entity to stand for another. But it is not merely a referential device but also serves the function of providing understanding. Metonymic concepts allow us conceptualize one thing by means of its relation to something else, structure not just our language but our thoughts, attitudes, and actions, and are grounded in our experience (Lakoff & Johnson, 1980, pp. 38-50). It allows us to use one well-understood aspect of something to stand for the thing as a whole, or for some other aspect of it, or for something to which it is very closely related (Gibbs, 1994, pp. 50-61). It is most appropriately seen as a tool that we think about things and to communicate our thoughts, and, as such, it is a property of both our conceptual and linguistic system (Gibbs, 1999, pp. 101-120). One of the reasons why we need metonymy is that it is impossible to encapsulate all aspects of our intended meaning in the language that we use. In other words, language always “under specifies” meaning interpretation (Radden et al., 1999, pp. 16-59). So, metonymy is a cognitive process in which one conceptual element or entity (thing, event, property), the vehicle, provides mental access to another conceptual entity (thing, event, property), the target, within the same frame, domain or idealized cognitive model (ICM) (Kovescs, 2006, pp. 99-120)

Taxonomies of Metonymy

Lakoff & Johnson’s Taxonomy

Metonymy has many types. Lakoff and Johnson (1980) proposed six main types of metonymy. They are the part for the whole, producer for product, object used for user, institution for people responsible, the place for institution, the place for the event.

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The part for the whole

Example (1) We need a couple of *strong bodies* for our team.

Example (2) There are a lot of *good heads* in the University.

In Example (1), body is part of people and strong bodies metonymically stand for strong people. In Example (2), when we say that we say that we need some good heads, we are using “good heads” to refer to “intelligent people”. The point is not just to use part (head) to stand for the whole (person) but rather to pick out a particular characteristic of the person, namely, intelligence, which is associated with the head.

Producer for product

Example (3) He bought a *Ford*.

In Example (3), Ford is a factory to produce cars. So he bought a car made by Ford factory. Ford is metonymically used to refer to the car.

Object used for user

Example (4) The *Sax* has the flue today.

In Example (4), originally, sax is a musical instrument and will not be affected by the flu. Here, the object *sax* is used to metonymically refer to the person who uses sax to sing the song.

Institution for people responsible

Example (5) The *Senate* thinks abortion is immoral.

In Example (5), originally, Senate is the institute where officials discuss affairs and they make decisions. Here Senate metonymically stands for the people who make decisions.

Example (6) I don't approve of the government' actions.

In Example (6), government originally means the institution where officials work. Here it stands for the leaders who make decisions.

The place for institution

Example (7) *The White House* isn't say anything.

Example (8) *Wall Street* is in a panic

In Example (7), originally, the white house is a place which is white. But now it metonymically stands for the institution where American leaders work and make decisions. In Example (8), Wall Street originally refers to the street called Wall. Now it stands for the place where financial institutions assemble.

The place for the event

Example (9) *Pearl Harbor* still has an effect on our foreign policy.

In Example (9), Pearl Harbor is a military base of America. But Japanese army wanted to attack it secretly and America deciphered their intention. From that time on, Pearl Harbor refers to the event metonymically.

Radden and Kovesces's Taxonomy

Radden and Kovesces (1999) proposed the taxonomy of metonymy. This taxonomy is hierarchical and divides metonymy types into over-arching categories: whole and part and part and part. Each of these categories contains a number of ICMs, which in turn sanction a range of metonymy types.

Whole and Part

Whole and part metonymies involve situations where part of something stands for a whole (eg. when “America” is used simply to refer to the United States of America) or situations where the whole of something is used to refer to a part of it. (e.g. when a “head count” is used to refer to a “people count”). Radden and Kovesces identify six ICMs within this over-arching category, which in turn give rise to twenty-one metonymy types. These involve physical entities (where one part of an entity can represent the whole or vice versa), scales (where the end of scale can be used to refer to the whole scale), constitution (where, for example, the material that an object is made of can be used to refer to the object itself), events (where a part of an event can stand for a whole event), category membership (where one member of a category can be used to represent the category as a whole), and properties of categories (where salient property of a category can be used to refer to a category as a whole).

Part and part

In part and part metonymies, something is used to refer to concept to which it is simply related (e.g. one might say that someone “married money”, where money is simply something that belongs to the spouse rather than being “part” of them). Within this over-arching category, Radden and Kovesces identify ten ICMs which give rise to forty-three types of metonymy-producing relationship. These involve action (where for example an object used in an action, or the manner in which an action is performed, can be used to refer to the action itself), perception (where an actual entity can be used to refer to one’s emotional or physical experience of that entity, as in “there goes my knee”), causation (where for example a particular cause may be used to refer to its effect, or vice versa), production (where for example the producer of an object might be used to represent the object itself), control (where the controller of an entity or of group of people may stand for the entity or the people themselves), possession (where an object represents the person who owns that object), containment (where a container stands for its contents, or vice versa), location (where for example a place might stand for the concepts they express), and modification of form (where a modified form of a word might stand for the word itself).

Radden and Kovesces’ taxonomy has made a significant contribution to metonymy literature as it has provided researchers with a common language with which to share their knowledge of, and insights into metonymy.

As we can see from the above taxonomy, a key idea for cognitive linguists is that metonymy draws on the relationship that exists between the two items within a particular knowledge network. And they should attach great importance to cognitive approach, which is mostly concerned with the conceptual properties of metonymy, and focus on the relationship between language and thought.

Current Study on Metonymy

In China, many cognitive linguistic scholars pay much concern to the mechanism, definition, function and operation of metonymy, and make analysis of metonymy from different perspectives in their papers: “Metaphor and metonymy activation” (LU, 2009), “The concept of metonymy recognition context restrictions” (JIANG & HE, 2010), “Understanding and translation of metonymy” (LU, 2011), “Prominent activation and implementation of metonymy” (LI & QI, 2012), and “Experience under the philosophical interface of metaphor and metonymy” (GONG & WANG, 2014).

There are many monographs concerning metonymy: *Metonymy cognitive interpretation of Metonymy in language* (LI, 2004) was the earliest interpretation from the perspective of cognitive metonymy and analyzed various models of metonymy theory, with particular emphasis on the effects of metonymy in language structure and metonymic distance between contiguous entities. It researched metonymy in different perspective at different levels and emphasized the integration among metonymy and the related disciplines. *Cognitive pragmatic study of Metonymy: vocabulary understanding* (JIANG, 2009) was on the basis of absorption and integration of pragmatics and cognitive linguistics research, with novel and unique perspective, and studied Chinese lexical metonymy in cognitive pragmatic framework. It discussed the factors that restrict metonymy, cognitive pragmatic mechanism and cognitive effects, and provided possibility of integrating cognitive linguistics and pragmatics and new ideas for metonymy research.

The cognitive study of metonymy (YANG, 2011) studied grammatical metonymy systematically based on the domestic and foreign study on rhetoric metonymy, conceptual metonymy and grammatical metonymy and put forward the triangle model to uniform interpretation of English, Chinese and Russian's metonymy. That grammatical metonymy was composed of interaction forms of structure, conceptual structure and logical structure. The plasticity of cognitive metonymy of source domain and the target domain mapping in the conceptual structure regulates the semantic contradiction between formal structure and logic structure, thus to illustrate the simplicity of the form structure and the richness of meaning of the sentence. It discussed systematically the context of the source domain in the conceptual structure and the restriction of the component configuration in the formal structure and made deep exploration into the cognitive grammar theory and some difficult problems in the study of grammar.

Cognitive metonymy (ZHANG & LU, 2010) discussed the nature and classification of metonymy, motivation of lexical and grammatical metonymy, pragmatic and metonymy, metonymy and discourse, metonymy and translation ,metonymy and literature. It systematically stated the current theory of cognitive metonymy in cognitive linguistics and made detailed analysis to the motivations of lexical, semantic, grammatical, pragmatic and discourse metonymy in various levels of language motivation based on the introduction.

The study of metaphor and metonymy (SHU, 2011) published a selection of 31 articles in recent 20 years of Chinese language key journals which comprised five parts: "comprehensive study of metaphor", "metaphor and discourse", "cross cultural studies of metaphor", "metaphor in Chinese", "metonymy research". It reflected the outstanding achievements of Chinese scholars in this field, and had important academic reference value to the study of metaphor and metonymy. *Study on English translation of the Analects of Confucius from the perspective of metonymy* (WANG, 2011) was based on the English translation of *The Analects* and made diachronic comparison from the perspective of translation of metonymy. The comparative study showed that translation can only be the process of Part for whole metonymy rather than the whole. In the process of translation, the translator's choice was influenced by ideology, patronage and dominant poetic external constraints and the subjectivity of the translator and other factors. Different historical conditions will produce different versions of the same or similar historical conditions but may not lead to the same translation strategy.

Referential Metonymy: a cognitive approach to lexical semantics (ZHOU & TANG, 2012) studied vocabulary and meaning from the cognitive level of metonymy. *The study of grammatical metonymy based on*

Chinese syntactic structure (WU, 2013) took the grammatical metonymy as a branch of conceptual metonymy, and made analysis from theoretical and practical perspectives. First of all, the definition, motivation, features and functions of grammatical metonymy are discussed, and the operation model of grammatical metonymy was constructed. Then, it took the complements of Chinese Resultative, adjective predicate, verb-object construction which became three types of syntactic structures as cases to illustrate the role of grammatical metonymy in Chinese syntactic structures and revealed the cognitive motivation behind the grammatical structure and explained the interactive relationship between grammar and metonymy. The study of language and high level metonymy (CHEN, 2013) was mainly based on the analysis of Chinese corpus and revealed the language behind the metonymic thinking mechanism, It discussed how the context restricted metonymic thinking and explained the language phenomenon which were difficult to be explained by some of the traditional grammar theory.

The study of grammatical metonymy in English and Chinese verb object constructions (YANG, 2015) studied the syntactic and semantic relations of the verb object structure in English and Chinese from lexicalization. The verb object structure can change the original semantic content and the grammatical nature of the predicate and object through the combination of words and the related semantics to form a new verb object structure. For example, if the object remains the interpretation of the original meaning, the predicate must be understood by the verb. If the predicate holds the interpretation of the original meaning, then the object must be understood by the noun, and the syntax and semantics of the verb object structure are connected. Nominalization and nominalization are actually re categorizations, and the cognitive operation principle is metonymic mapping.

Papers concerning metonymy were published by foreign authors: "Speaking and Thinking with Metonymy" (Gibbs, 1999, pp. 60-76, transferred from Panther, 1999) put metonymy in cognitive context to study and enriched the evidence for the conceptual basis of metonymy that Grice's conversational implicature can be regarded as being motivated by conceptual metonymy, anaphora. And the paper proposed that metonymy reasoning would contribute to the formation of coherence. "Metonymy and Conceptual Integration" (Fauconnier & Turner, 1999, pp. 77-90, transferred from Panther, 1999) researched the relationship between conceptual blending and metonymy, that the conceptual entity is connected to the blending space through metonymy. "On Distinguishing Synecdoche and Metonymy" (Seto, 1999, pp. 91-120, transferred from Panther, 1999) distinguished from synecdoche from metonymy, holding that there is a clear conceptual difference between synecdoche and metonymy. "The Ideologies behind Newspaper Crime Report of Latinos and Wall Street/CEOs: a Critical Analysis of Metonymy in Text and Image" (Theresa & Waugh, 2013), based on more than 25 online news magazines of the United States, made careful study on Latin immigration crime in Wall Street of the United States from the year 2004 to the year 2011 and showed that metonymy works in the text and has formed a great impact on the dominance of the American media discourse with strong thinking. It held that metaphor plays an important role in the analysis of critical metonymy, and demonstrates the potential of metonymy in media discourse. "Metonymy and Reference-Point Errors in Novice Programming" (Miller, 2014) showed that the new hands who learned computer programming wrongly utilized the structural elements to refer to the elements they want to refer. When they wanted to refer to the whole thing, they often found a characteristic of the things with the use of metonymy context to check the mistakes of these reference points and proposed a hypothesis that to get element structure, the students are more likely to identify the reference element. Through two well designed experiments, it proved that the students were more dependent on the habit of metonymy rather than the

mechanical rules in the successful programming. “Metonymy and Text Messaging: A Framework for Understanding Creative Uses of Metonymy” (Littlemore & Tagg, 2016) showed that metonymy is to utilize an entity, process or event to refer to other related entity, process or event, and important communication means for people’s ideas. But in the daily language’s innovation it has not been paid enough attention. The paper found how metonymy is used in daily texts by the 11067 words from the text information. Metonymy in the creative use of evidence. These papers provide a valuable reference for the correct understanding of the nature of metonymy.

Conclusion

The theories of metonymy are fully developed in recent years not only in west countries but also in China. Scholars make use of the cognitive definition and classification to research metonymy ranging from lexical research, grammatical research to contextual research. These researches break the traditional view that metonymy is only a relation involving substitution and hold that metonymy is not restricted to language but is a cognitive process. However, the researches above mentioned are inclined to adopt introspection methods and lack objective data to make the theories more convincing. Corpus method of Computer Science and ERP method of Brain Science begin to be applied to metonymy research, but the combination is still in the initial stage.

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