BT+ Approach to the Meaning Construction of Metonymy-Based Chinese Cyber-Expressions

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Abstract: China has the biggest population of netizens in the world and more and more cyberspace users often use cyber-expressions in their Internet communication and some cyber-expressions are even used in our daily life offline. With the increasing popularity of these cyber-expressions, they have caught the eyes of more and more scholars and these expressions’ formation and meaning construction are analyzed from many perspectives. From the perspective of Cognitive Linguistics, the Chinese cyber-expressions are formed with the help of such cognitive mechanisms as metaphor, icon iconicity, metonymy and metaphonymy. While the metonymy-based e-terms account for a large proportion of all the new cyber-expressions, little is discussed about metonymy-based expressions in previous studies related to the Chinese cyber-expressions. In the present paper, 752 metonymy-based e-terms from a closed corpus will be studied exhaustively and the meaning construction of these kinds of expressions will be systematically analyzed based on the Blending Theory under the framework of Cognitive Linguistics with an attempt to fill the gap in the previous studies.

Keywords: metonymy-based, Cyber-expressions, Blending Theory, Meaning construction.

1. Introduction

Netspeak is a special language form different from the traditional language forms, which has been created and updated by people in more than 20 years of Internet communication. Cyber-expressions, with concise, novel and fashionable forms, are favored by the majority of netizens and scholars from all walks of life and have been updated and developed rapidly. The mainstream media and magazines often quote online buzzwords, which have gradually become the preferred expressions in people’s daily communication from online to offline. Therefore, cyber-expressions have caught the eyes of more and more scholars and a lot of descriptions and analyses are carried out concerning this issue. But little is discussed about the meaning construction of the metonymy-based e-terms. In order to fill the gap, a closed corpus, which is made up of 752 metonymy-based cyber-expressions from newly-published Chinese neologism dictionaries, is established in the present paper. Based on the previous studies, Blending Theory of Cognitive Linguistics is employed in the present paper to systematically analyze the metonymy-based e-terms and explore the meaning construction when they are used in communication.

2. Multidisciplinary Studies on Chinese Netspeak

2.1. General Linguistic View

When we input the word “netspeak” with the Google engine, 165,000 concordance lines can be retrieved, but most of them only give simple introductions to the netspeak vocabulary and basic classifications.

Crystal, investigating the impact of the Internet on language, provides an explanation of netspeak and discusses the features common to most Internet communication. He also casts many lines on emails, chat groups, Internet users and virtual communities [1]. Posteguillo describes the production of new e-terms and the close relations between different virtual communities [2].

In China, numerous pieces of research on netspeak can be found. Yu Genyuan conducts an overall analysis of netspeak, including the lexical features of Chinese netspeak. Meanwhile, he makes a comparison between netspeak and the language forms of traditional media, such as TV, newspapers and radio broadcasting [3]. He also analyzes people’s attitudes towards netspeak and proposes some suggestions for standardizing Chinese netspeak.

In addition, Li Tiefan, Wu Chuanfei and Zhao Jun briefly introduce Chinese netspeak and summarize the relevant studies in China [4-6]. Wang Jianwen describes the current state of netspeak and predicts its developing trend [7]. Some scholars, such as Chen Zhiwei & Zhang Xizhen, Sun Caihui, Zhao Xiaohua, analyze the influence of netspeak on the Chinese language, and propose some suggestions for people’s attitudes towards the new language form [8-10].

2.2. Pragmatic View

A number of scholars show their interest in how people use language in the online environment. Condon and Cech make a comparison between face-to-face communication and online communication [11], and Werry discusses the features of online communication from a pragmatic point of view [12]. Also, some scholars have discussed the principles of communication, the stylistic features of keyboard-mediated English talking, the features of ICQ dialogues, and the features and contexts of emails [13-17].

2.3. Sociolinguistic View

Topics on social relationships between netizens arouse much interest among many scholars. Paolillo presents a highly structured relationship between participants’ social positions and the linguistic variants they use [18]. The emerging sociolinguistic relationship is more complex than what is predicted by the current sociolinguistic theories of face-to-face interactions. Offering unique contributions to the study of language variation and change, the sociolinguistic
investigation of online interactions suggests that more detailed and delicate information about social contacts can be obtained. Huang Guangfang and Jin Zhiru analyze the sociolinguistic characteristics of online communication [19-20], while Zheng Qing and Zhou Xuyang give a general description of netspeak from the sociolinguistic perspective [21-22]. They all agree that netspeak is a variety of languages, while Hou Guojin coins the word “weblect” for it [23].

2.4. Cross-cultural View

Cultural factors shown in the online communication are another popular topic for researchers. Numerous cross-cultural communication (CCC) studies discuss the links between culture and web usability. These studies mainly focus on the interactive relationship between the new cross-cultural communication model and the cyber environment [24-26].

According to Faïola & Matei, two converging areas attract people’s attention when netspeak is studied from the cross-cultural viewpoint: 1) the computer as a medium in person-to-person communication; 2) the person as the receiver and processor of the information who is influenced by a complex blend of cultural contexts [27].

2.5. Cognitive Linguistic View

Nowadays, more and more researchers are studying netspeak from a cognitive point of view. Maglio & Matlock (1998) make a discussion on the nature of people’s metaphorical conception of the World Wide Web. According to them, people naturally think of the web as a kind of physical space in which they move, though information on the web is not physical and web users do not move [28]. Anderson (2006) argues that metaphors were initially used in web design and navigation to help users become comfortable with unfamiliar concepts related to computers and the World Wide Web [29].

In China, studying netspeak from the cognitive point of view has become a new trend in the relevant academic field. Lin Lifang argues that a large number of new linguistic forms have come into being with the help of the metaphor mechanism. And she also holds that metaphoric thinking has injected vigor into computer science and expanded a new and vast horizon in the development of computer language [30]. Yu Zi thinks that metaphor prompts netspeak innovation [31]. Shen Tong & Liu Jun propose to analyze the Internet language from the conceptual integration network, but a systematic and unified explanation of netspeak cannot be found from them [32].

In retrospect, many scholars have made a lot of descriptions and analyses concerning netspeak. However, their studies are mostly confined to the fields of general linguistics, rhetoric, cross-cultural communication, and sociolinguistics. An all-sided study of netspeak from the cognitive perspective is still hardly seen, not to mention a systematic analysis by means of the relevant theories of BT in Cognitive Linguistics. To fill in the blank, the present study will conduct a systematic and unified analysis of netspeak by means of the relevant theories of BT in Cognitive Linguistics.

3. Theoretical Framework: Blending Theory

The theoretical framework applied in this paper is Blending Theory plus (BT+), adapted from Blending Theory (BT) in cognitive linguistics on the basis of Mental Space Theory (MST). In this section, the author will review MST and BT as well as their relevant studies, based on which BT+ will be proposed to further specify BT in order to make salient the operation mechanism behind the cognitive iceberg.

3.1. Mental Space Theory (MST)

Mental Space Theory (MST), originally proposed by Gilles Fauconnier, is initially applied to describing how language users assign and manipulate references, including the use of names, definite descriptions and pronouns [33-34]. MST takes a particular view of meaning: meaning is not in language; rather, language is like a recipe for constructing meaning, a recipe that relies on a lot of independent cognitive activities. According to this view, when we study linguistic meaning, we are studying the way that language provides a patchy and partial trigger for a series of complex cognitive procedures [35].

3.2. Blending Theory (BT)

Blending theory is also called conceptual integration theory or conceptual blending theory. In this paper, blending theory (BT) will be adopted as a technical term. With the development of mental space theory, the key notion of blending theory is introduced and Fauconnier unfolds his four-space model by which he argues that the online meaning of natural language can be constructed [36]. During the following years, Fauconnier and his fellows constantly exert their efforts to optimize the theory. They argue that conceptual blending is a basic cognitive operation that operates uniformly at different levels of abstraction and under superficially divergent contextual circumstances.

In the year of 2002, the appearance of The Way We Think by Fauconnier and Turner can be seen as a landmark in this field. Based on their previous works, in this book, Fauconnier and Turner further point out that conceptual blending is a basic cognitive mechanism that goes through nearly all cognitive activities. In addition, they make an explicit statement on those operational principles and working rules. Nevertheless, how those operational rules work and whether this blending theory really has the mighty explanatory power on all cognitive activities still remain a question.

Fauconnier and Turner present the network model of conceptual blending. It is said that a complete network model consists of these basic elements: the four-space hypothesis, the operation of spaces, mapping and projection, the process of integration and its results [37].

In a standard conceptual integration network, there are altogether four spaces: two input spaces, the generic space and the blended space.

Input Spaces: There are two input mental spaces in a network. The input spaces are constructed according to what we talk about.

Generic Space: Whatever structure is recognized as belonging to both of the input spaces constitutes a generic space. In the construction of the network, it seems that the inputs of the network share a common structure. The generic space reflects some common structure and organization shared by the inputs and defines the core cross-mapping between them.

Blended Space: The fourth mental space is the blended space, often called “the blend”, into which structure from two inputs is projected. The blended space contains information from each of the inputs as well as the emergent structure that arises as a product of an imaginative process of integration.
However, the blend of the two input spaces is not their sum or juxtaposition. Blend contains not only structure captured in the generic space but also a more specific structure, as well as the structure that is impossible for the input spaces.

The four spaces are not isolated but connected through cross-space mappings and selective projection in the network for its goal.

Cross-space Mapping: A partial cross-space mapping connects counterparts in the input spaces. Such counterpart connections are of many kinds: connections between frames and roles, connections of identity or representation, analogical connections, metaphoric connections, and more generally, vital relations. When there are some matches between two input spaces, cross-space mapping between them does work [38].

Selective Projection: Projection to the blend is very important. It is a general property of mental space configuration and is essential in the conceptual blending network. It always does work unconsciously in meaning construction. There may be many tentative projections, but only some accepted ones will appear in the final network. That’s to say, not all elements and relations from the inputs are projected to the blend. Sometimes, two counterparts are both projected, sometimes, only one, and sometimes none. Sometimes, counterparts in the input spaces are fused in the blend, but often not. And, sometimes an element in one input space without a counterpart in the other is projected to the blend. The projection of structure to the blend is typically partial. Input spaces can not only providers of projections to the blend but also receivers of projections back from the developed blend. Meanwhile, as we project to a blend, we are also working on the entire network, and we may recruit a new structure to the inputs precisely to make it available for possible projection to the blend.

We now have the basic elements and operations of the network, but the integration is not finished. It needs another process to complete. The integration process involves three steps: composition, completion and elaboration.

The composition of elements from the inputs makes relations that do not exist in separate inputs available in the blend. It involves attributing a relation from one space to an element or elements from the other input space. It is also involved in integrating an element with a frame. It can arise from contextual accommodation of a concept in one input to apply to elements in the other.

Completion brings additional structure to the blend. Sometimes completion occurs when the structure in the blend matches the information in a human’s long-term memory. Through completion, our familiar structure is recruited into the blended space. Then we see some parts of a familiar frame, and much more of the frame is recruited silently but effectively to the blend, where wide ranges of background meanings are recruited. Thus, the blend is integrated.

Elaboration has a tight relationship with the second step. It is a process that often involves mental or physical simulation of the event in the blend. We elaborate the blend by treating it as a simulation and running it imaginatively according to the elements and operations that have established for the blend.

During the process, the links to the inputs are constantly maintained, so that all these “sameness” connections across spaces seem to pop out automatically, yielding a flash of comprehension. Anything fused in the blend projects back to counterparts in the input spaces.

As a result of integration, the blend develops a new structure that is not in the input spaces. We call it emergent structure. Now, we will use the following Figure 1 to show the conceptual integration process. In the figure, the mental spaces are represented by circles, elements by points (or icons) in the circles, and the connections between elements in different spaces by lines. The solid lines indicate the matching and cross-space mapping between the inputs, the dotted lines indicate connections between inputs and generic or blended spaces, and the solid square in the blended space represents an emergent structure.

Building a blending network involves setting up mental spaces, mapping across spaces, projecting selectively to a blend, locating shared structures, projecting backward to inputs, recruiting new structures to the inputs or the blend, and running various operations in the blend itself. The process of conceptual blending projects elements and relations from each input space to form an integrated representational structure that may differ substantially from that in the input spaces. Together, the four spaces form a conceptual blending network that can lead language users to produce novel conceptualizations of actions and events.

Based on Blending Theory put forward by Fauconnier and his fellows, the present thesis further revises and specifies the four-space model established in the framework of BT by adding to it a Processing Space. The revised version will herein be called Blending Theory plus (BT+ for short). Then, within the framework of BT+, a systematic analysis of 752 metonymy-based e-terms will be conducted. The methodologies used during the analysis process will be both quantitative and qualitative.

4. BT+ Approach to Metonymy
4.1. Metonymy

Metonymy has received much less attention from cognitive linguistics than a metaphor, although it is probably even more basic to language and cognition. Metonymy is a conceptual projection whereby one experiential domain (the target) is partially understood in terms of another experiential domain (the source) in the same common experiential domain or within the same Idealized Cognitive Model (ICM for short). The ICM concept is meant to include not only people’s encyclopedic knowledge of a particular domain but also the idealized cultural model concerned. See Figure 2.
A conceptual domain, or ICM, can be viewed as a whole that is constituted by parts; more specifically, the conceptual entities, or elements, are the parts that constitute the ICM that is the whole. Thus, metonymies may emerge in two ways: 1) either a whole stands for a part or a part stands for a whole; 2) a part stands for another part.

See Figure 3. The parentheses around the various parts in 1) indicate that metonymy emerges between the whole and a part (PART1)—not between a part and another part (but with the other parts being present in the background).

See Figure 4. The parentheses around the WHOLE ICM in 2) indicate that metonymy emerges between a part and another part—not between a whole and a part (but with the whole ICM being present in the background).

1) Whole ICM and its Parts

WHOLE ICM

PART1
(PART2
PART3
etc.)

Figure 3. Whole ICM and its parts

2) Parts of an ICM

(WHOLE ICM)

PART1
PART2
PART3
etc.

Figure 4. Parts of an ICM

Version 1) refers to metonymies in which the relationship between the whole ICM and the part in the whole, and two kinds of metonymies can be produced based on the relationship. Specifically, one is the whole is used to refer to one of its parts (THE WHOLE FOR THE PART), and the other is one of its parts is used to refer to the whole (A PART FOR THE WHOLE). And version 2) displays the relationship between the different parts within the whole ICM (THE PRODUCER FOR THE PRODUCT). [44]

Take the conceptual metonymy THE PART FOR THE WHOLE as an example. This metonymy underlies a wide variety of expressions in our everyday language. For example:

The automobile is clogging our highways. (= the collection of automobiles)
We need a couple of strong bodies for our team. (= strong people)
There are a lot of good heads in the university. (= intelligent people)
I’ve got a new set of wheels. (= ear, motorcycle, etc.)
We need some new blood in the organization. (= new people)

In these cases [40], as in other cases of metonymy, one entity is being used to refer to another. Metaphors and metonymy are different kinds of processes. Metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding. Metonymy, on the other hand, has primarily a referential function, that is to say, it allows us to use one entity to stand for another. But metonymy is not merely a referential device. It also serves the function of providing understanding. For example, in the case of the metonymy THE PART FOR THE WHOLE, many parts can stand for the whole. Which part is picked out determines which aspects of the whole are brought to focus. When we say that we need some good heads on the project, we are using “good heads” to refer to “intelligent people”. The point is not just to use a part (head) to stand for a whole (person) but rather to pick out a particular characteristic of the person, namely, intelligence, which is associated with the head. The same is true of other kinds of metonymies.

Metonymy also serves some of the same purposes that metaphor does, and in somewhat the same way, but it allows us to focus more specifically on certain aspects of what is being referred to. Like metaphoric concepts, metonymic concepts are part of the ordinary, everyday way we think and talk.

4.2. Metonymy in BT+

Metonymy in BT+ is operative in the processing space. The operation of metonymy in BT+ looks like Figure 5.

The elements and structures from both input spaces and the generic space are selectively projected into the processing space, in which the metonymic relationship between the elements is established and one element can provide mental access to another with the help of some cognitive strategies and encyclopedic knowledge. Thus, the composition and completion of the elements and structures are fulfilled in the processing space. Then the emergent structure is obtained in the blend after elaborating on the elements and structures from the processing space according to the emergent logic.
4.3. Metonymy in the Corpus

Table 1. Metonymies identified in the corpus

<table>
<thead>
<tr>
<th>Rank</th>
<th>Type</th>
<th>Number</th>
<th>Rate (%)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PART FOR WHOLE</td>
<td>716</td>
<td>95.22%</td>
<td>keai, laoban, 123</td>
</tr>
<tr>
<td>2.</td>
<td>PART FOR PART</td>
<td>18</td>
<td>2.39%</td>
<td>er, huashu, laoshu</td>
</tr>
<tr>
<td>3.</td>
<td>WHOLE FOR PART</td>
<td>18</td>
<td>2.39%</td>
<td>kelindun, tangseng</td>
</tr>
</tbody>
</table>

Generally speaking, conceptual metonymy can be specified into three basic metonymies: PART FOR WHOLE, WHOLE FOR PART and PART FOR PART. After careful analysis, 752 e-terms in the corpus are found to be metonymy-driven, among which 716 e-terms make use of PART FOR WHOLE metonymy (taking up 95.22 percent of all metonymy-based e-terms), 18 of PART FOR PART metonymy (taking up 2.39 percent of all metonymy-based e-terms) and 18 of Whole FOR PART metonymy (taking up 2.39 percent of all metonymy-based e-terms). See Table 4.1 for details.

4.4. A Case Study: PART FOR WHOLE Metonymy

In netspeak, some short forms are often preferred for their corresponding complete expressions to save time as well as money. For example, “TKS” is often used for “thanks”. Since most netizens know English very well, many short forms or acronyms for complicated English expressions are widely accepted. In addition, netizens often coin new short forms out of Chinese Pinyin (e.g., “BT” for “biantsi” to mean abnormal) or characters (e.g., “kei” for “kelianmeirenai” to mean unpitied). The elements that constitute the short forms or acronyms are often the parts of their corresponding complicated forms or expressions. And the short forms are often used to stand for their corresponding complicated expressions. For example, “keai”, made up of the two characters from “kelianmeirenai”, is often used to mean “kelianmeirenai” in netspeak. The part-whole relationship in form is considered to be a kind of metonymic relationship. Therefore, in the present study, it is held that these short forms are obtained from their complete expressions by means of PART FOR WHOLE metonymy. In order to demonstrate this type of metonymy in RBT, “keai” is taken as an example in Figure 6.

Being the expressions to describe animate creatures, “keai (lovely)” and “kelianmeirenai (unpitied)” are opposite in meaning. See Figure 6. They are respectively put into the input spaces, and then selectively projected into the processing space, where their metonymic relationship is established by means of SHORT FORM FOR COMPLETE EXPRESSION (i.e., being the first and the last characters of the expression “kelianmeirenai”, “ke” and “ai” are chosen to form “keai” for it). “keai” and “kelianmeirenai” are in semantic collision with each other, in which the meaning of “kelianmeirenai” is fused into “keai”. As a result, “keai” becomes an expression with both a commendatory meaning and a derogatory one, based on which it is elaborated in the blend to act as a pun that can create an ironic meaning when it is used.
4.5. A Case Study: PART FORT PART Metonymy

With a summary of the possible instances of metonymy based on previous studies, Wen Xun and Ye Kuang illustrate the conceptual metonymy using Figure 7[41].

They describe Figure 7 into 4 possible types, namely CONCEPT$_1$ [FORM$_1$] FOR CONCEPT$_2$ [FORM$_2$], CONCEPT$_1$ [FORM$_1$] FOR CONCEPT$_2$ [FORM$_1$], CONCEPT$_1$ [FORM$_1$] FOR CONCEPT$_2$ [FORM$_1$], and CONCEPT$_1$ [FORM$_1$] FOR CONCEPT$_1$ [FORM$_2$].

Based on the data analysis, it is found that some e-terms are used by means of CONCEPT$_1$ [FORM$_1$] FOR CONCEPT$_1$ [FORM$_2$] in the PART FOR PART metonymy. To show the PART FOR PART metonymy in RBT, “huashu” is taken as an example.

Figure 6. The BT\textsuperscript{+} analysis of “keai”

Figure 7. A metonymy formula

Figure 8. The BT\textsuperscript{+} analysis of “huashu”
In Figure 8, “huashu (used in Hong Kong)” and “shubiao (used in the mainland of China)” are respectively put into the input spaces. The two expressions refer to the same object (i.e., the computer mouse) that is projected into the generic space, based on which the “huashu” and “shubiao” can be regarded as the two parts in the same ICM. Then they are projected into the processing space, where a metonymic relationship is established between them by means of CONCEPT₁ [FORM₁] FOR CONCEPT₁ [FORM₂]. Since “huashu” from Hong Kong is not commonly used in the mainland of China, it is easy to be made popular among netizens of the mainland for its novelty. As a result, “huashu” and “shubiao” can be substituted for each other to mean the computer mouse in netspeak.

4.6. A Case Study: WHOLE FOR PART Metonymy in the Corpus

Compared with PART FOR WHOLE metonymy, the proportion of WHOLE FOR PART metonymy is much smaller in the corpus. In most instances of WHOLE FOR PART metonymy, Category-and-Property ICM plays a key role. Let’s take the “kelindun” in netspeak as an example in Figure 9.

**Figure 9. The BT⁺ analysis of “kelindun”**

Clinton (kelindun) was the American ex-president. During his term, America developed much faster than ever before under his wise leadership. He was world-famous for his distinguished leadership, and also notorious for his sex scandals. Among all of his sex scandals, his affair with the White House intern Monica Lewinsky was the most eye-catching. In the beginning, Clinton refused to admit the case, but in the end, he was proven to tell lies and had to give up his political journey when the truth was disclosed. Given the incident, his lying about the wrongdoing made him more conspicuous and well-known. So telling lies, being one of his salient properties, is always activated in people’s minds every time the name “Clinton” is mentioned. As is displayed in Figure 4.8, a metonymic relationship is built up between “kelindun” and “telling lies” by means of CATEGORY FOR PROPERTY metonymy with the help of the background knowledge projected from the genetic space. After the processes are carried out in the processing space, “kelindun” is obtained in the blend to mean “telling lies”.

5. Conclusion

Netspeak, a special form of language variant, is playing an important role in our online and offline communication. In the formation of e-terms, such mechanisms as metaphor and metonymy are mainly utilized based on Cognitive Linguistics. Metonymy is even more fundamental than metaphor in language use. In the present paper, 752 metonymy-based cyber-expressions are analyzed exhaustively from three ways of metonymy, with an attempt to make clear how the metonymy mechanism works when the e-terms are created and used in our communication, which may shed some light on our language mystery.

References


