A Cognitive Study on Naming Mechanisms of QQ Nicknames

Ma Jinge, Li Xiaolong

College of International Languages and Cultures, Hohai University, Nanjing, China

Email address:

xlee@hhu.edu.cn (Li Xiaolong)

Abstract: Language is the carriage of ideas. Social reality pushes the advancement of language, and language reflects social reality. As the world has entered into the Age of Information, people are exposed to digital screens and online social media. Nowadays, people, especially young people, lay great emphasis on not only their real-life individuality but also their online images. Among all the social media apps, QQ is favored by Chinese people for a long time with over 530 million accounts. With fewer requirements in making nicknames, the naming mechanisms of QQ nicknames provide an interesting perspective for cognitive and linguistic study. Nicknames on social media are regarded as a mutation of people's traditional names, allowing people to extend their creativity and project their personalities on the nicknames. This research chooses the QQ nicknames of the Grade 2020 undergraduates at Hohai University as research objectives. To find out the feature of the nicknames of the target group and explore the naming mechanisms underlying the nicknames, first, the essay goes through previous studies on the naming mechanisms and absorbs related research experience, and second, establishes a theoretical framework that includes three models: Event-domain Cognitive Model (ECM), the Conceptual Metaphor Theory (CM_1), and the Conceptual Metonymy Theory (CM_2). After collecting 255 QQ nicknames and establishing a closed corpus of the nicknames, this paper makes reasonable categorization for further study. To solve the rest of the research problems, a thorough analysis is made and two compound models are established. Results show that the $QQNE+CM_1$ Model is the most commonly seen naming mechanism of the target group. At the end of the paper, a discussion and evaluation of the entire research are done. This essay provides a new aspect for understanding the naming mechanisms of the young generation and may be conducive to further related studies.

Keywords: QQ Nicknames, ECM[+] Model, Cognitive Mechanism, Online Personal Identity

1. Introduction

1.1. Research Background

American social researchers and demographers Mark McCrindle, Billy Idol, Neil Howe, and William Strauss categorized kids who were born in different periods of history into different groups, respectively, the Lost Generation (1883-1900), the Greatest Generation (1901-1927), the Silent Generation (1928-1945), Baby Boomers (1946-1964), Generation X (1965-1980), Millennials (1981-1996), Generation Z (1997-2012), and Generation Alpha (early 2010s-mid 2020s) [4]. Commonly speaking, we regard kids that are born under the same historical period as a certain group sharing the same or similar personality mask. Among them, Generation Z, to which the author also belongs, is

characteristic of exposure to digital screens and the great influence of the internet, described as "native users of technology" [10]. Growing up in this period when social media and online communication thrive to prosperity, Gen Z tends to deal with interpersonal contact through phones rather than face-to-face communication. They place great emphasis on shaping their image and identity in a virtual world, and thus, just like people's identities in the real world, the online nickname is an important component of this shaping process.

In China, nowadays, there are many social media that allows online communication, including Weibo, QQ, and WeChat (Weixin). QQ is an online chatting app developed by Tencent Company for the first time in 1999, and it gradually went viral as people became more and more interested in using the online account to keep each other in contact. It has become one of the most popular online chatting channels, especially

among young people.

QQ nicknames are a type of online code name, which can also be seen as the transformation of traditional real-life names. QQ nicknames vary greatly from the names in reality, and compared to traditional names, they are more diverse in form, richer in content and expression, concealed in identity, and can be changed easily. This is mainly because the requirement for a QQ nickname is loose, which allows the usage of any type of language, symbols, punctuation, and emojis, and this means that QQ nicknames turn out to be in multiple forms that may completely differ from what we conventionally think of as a decent "name".

Therefore, when it comes to the naming of their QQ ID, users may extend their ideas or personalities, and make creative nicknames that will hardly be regarded as real usable names in reality. Therefore, by probing into different kinds of QQ nicknames, we may figure out different types of online nicknames and the cognitive mechanism behind QQ nicknames.

1.2. Research Objectives

This research is aimed at probing into the naming mechanisms of the QQ nicknames of Grade 2020 undergraduates at Hohai University from a cognitive perspective. After establishing a complete theoretical framework, which is the combination of Event-domain Cognitive Mechanism, Conceptual Metaphor Theory, and Conceptual Metonymy Theory, the paper will construct a closed corpus of QQ nicknames used by the target group and categorize the nicknames for the sake of a sum-up and classification of the naming patterns.

1.3. Innovation of the Research

There are two innovations regarding this research. First, the introduction of the Conceptual Metaphor Theory is one of the most important innovations of relevant research. That is because, in past studies related to charactonym, only metonymic naming is considered to be reasonable. However, as the naming context moves to the online environment, the metaphor mechanism also becomes important and starts to play an indispensable role in forming a nickname. Second, this essay selects the QQ nicknames as the research objectives. So far, there hasn't been much research related to online nicknames and cognitive mechanism analysis from a linguistic level. Most of the naming research is conducted on the basis of sociology or else.

1.4. Significance of the Research

Although personal and individual, names play an important role in social interactions and impressions. In fact, social connection is not only a significant section of being human but is also a key to human happiness and health. Similar to people's communication in real life, online friend-making or communication is also influenced, more or less, by the impression of nicknames. Particularly, people may choose to conceal their real looking, and this makes the rest of personal information takes up even more responsibility in communication. By studying the naming mechanism, we can find a reasonable explanation for students' online preferences, and what they intend to be recognized as.

Social media feeds our intersecting human needs for connection, reward, and novelty—leaving us vulnerable to screens and online communication. The fast development of online chatting and friend-making apps helps with the prosperity of screen chatting, and people, especially young people, turn to pay more attention to their online social media images. Through social media, young people need to create a personal profile that allows their full personalities to flow. Therefore, the study of QQ nicknames from a cognitive and linguistic perspective provides a new angle to dig into the function of online nicknames and suggests a new way to paint a big picture of the overall personality of the young generation.

We should note here that the nicknames should be viewed as providing evidence of people's particular preferences at a particular time in their life. They may change over time for a variety of reasons. These patterns are not static or fixed. Still, by selecting a certain group of youngsters and concluding the naming mechanisms, we can figure out the significance of nicknames for people.

2. Literature Review

Naming mechanisms are a significant component in the study of charactonym, toponym, sociology, and cross-study related to the technology field. Studies of naming mechanisms overseas usually focus on sociology. Watkins and London conducted social surveys in 1994 regarding the naming habit of Jews and Italians of the year 1910 [13]. Lieberson and Mikelson discussed the naming features of African Americans the next year [8]. Perl and Wiggins turned to the naming characteristics of Protestants and Catholics in the U.S. and reached their results in 2004 [9]. Bhatia (2005) discussed the naming patterns of violent characters [1]. In China, Zhao Yue (2013) discussed the function of metaphor in the nickname of football team names; Leng (2016) and Huang (2019) respectively made their studies on toponym of the U.K. and the U.S., while Li (2016) and Xiao (2021) turned their eyesight to the naming of traditional Chinese cuisines and drink [14]. Apart from these, Jia (2020) extended to the naming of historical celebrities' nicknames and Zhu (2020) made an analysis on charactonym of Lu Xun's literary works [15].

3. Theoretical Framework

3.1. Event-Domain Cognitive Model

The cognitive model covers all the cognitive representations of knowledge stored in a certain domain [11]. Chinese scholar Wang Yin (2005) comes up with the Event-Domain Cognitive Model (ECM) [12], which aims at providing not only a linear but also a hierarchical structure that deals with both static and dynamic elements in semantic, syntax, pragmatics, and other linguistic studies. The basic structure of this model is shown in Figure 1:
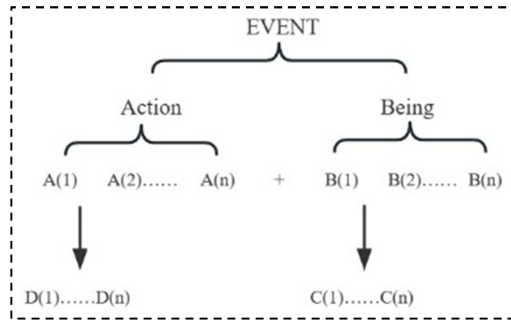
Figure 1. Event-Domain Cognitive Model.

Wang suggested that people interact with the secular world through units of events and develop their own cognition. This means that the language expressions are shaped by the impact of these events. From Figure 1, we can see that there are three levels in this cognitive system. "EVENT" consists of two elements: Actions and Beings. Actions refer to both dynamic and static behaviors, and Beings indicate both concrete concepts and abstract or virtual concepts like people, things, etc. For the third level, we use distinctive features to describe Actions and categorical information to link with certain Beings. Besides, the event still is not completely divided from other events and is confined to an approximate range, the dotted line around it showing this notion.

3.2. Conceptual Metaphor (CM₁) Theory

As a language usage, a metaphor states that one thing *is* another thing [6]. It equates those two things for the sake of comparison or symbolism, not because two domains are the same. Lakoff and Johnson (1980) first argued that conceptual metaphor denotes the conventional relationship between one domain and another, while "concept" means the motivation of metaphor at the conceptual level [2]. They pointed out that metaphor is not just a rhetorical phenomenon in language, but also a sort of thinking pattern for people to recognize and understand things. In other words, the essence of metaphor is to comprehend and embody one type of thing in terms of another [5].

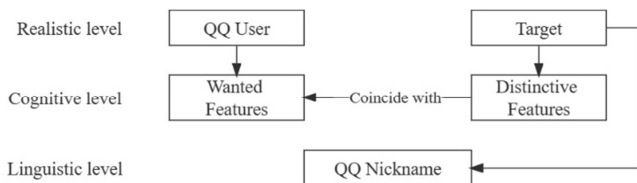In naming mechanisms, the functioning of CM_1 could be illustrated as follows:

Figure 2. CM₁ Mechanism in Naming.

3.3. Conceptual Metonymy (CM₂) Theory

The conceptual metonymy theory was also proposed by Lakoff and Johnson in 1980 for the first time. Lakoff and Turner (1989) regarded metonymy as "one entity is employed to substitute for the other due to their coexistence in the same domain". Same to CM_1 Theory, conceptual metonymy is also a cognitive mechanism for human thought and language

expressions [2]. The major difference is that metaphor is the cross-domain mapping based on the similarity between two objects, while metonymy is a mapping process that occurs in the same domain reflecting the projection based on correlation. Metonymic usage is also found in naming patterns [3], owing to that metonymy is the most fundamental process of meaning expansion, more important than metaphor [7].

When this cognitive mechanism is perceived in the QQ nicknames, the function can be described in Figure 3:
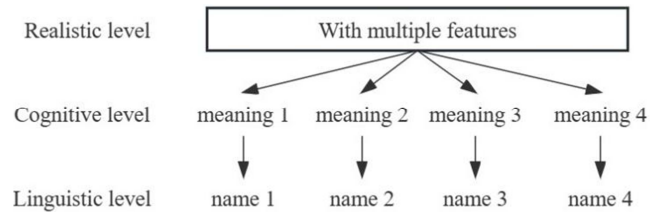

Figure 3. CM2 Mechanism in Naming.

3.4. Summary

In making a QQ nickname for themselves, people adopt both the metonymy mechanism and the metaphor mechanism. On one hand, people tend to select the salient feature of one thing and use a nickname to show this feature [3]—this leads to the function of the metonymy mechanism. On the other hand, people find similarities of themselves with other domains, and the nicknames may turn out to be exactly this domain—this leads to the function of the metonymy mechanism. In traditional naming of China, people hardly will use the metaphor mechanism to name themselves, yet on the internet, the metaphor mechanism may also be found.

4. Methodology

4.1. Research Questions

To meet the purposes of this essay, it is necessary to solve the following three questions:
(1) How are the naming patterns of the QQ nickname classified, based on what principle?
(2) What is the main cognitive mechanism functioning behind the naming of the QQ nicknames among the target research group?
(3) What is the salient feature of the QQ nicknames for the target research group?

4.2. Data Collection

In this part, the process from the selection of the original samples to a full analysis of the linguistic phenomenon will be illustrated in detail. To step down to analyze the naming mechanism, the first step is to gather representative samples. This part includes two sections, the collection of QQ nicknames and the construction of a closed corpus of QQ nicknames.

4.2.1. The Selection of the QQ Nicknames

This research mainly focuses on the naming tendency and

features of the undergraduates of Grade 2020 at Hohai University, which composes the source of the corpus. QQ nicknames that are accessed and used in this paper are all from the contact list of the author, and these QQ IDs are all used and controlled by real-life Chinese students from Grade 2020. The naming of their QQ nicknames is at the willingness of the users themselves without any interference from the research. Altogether, 255 names will be used as the research objectives. The names are selected directly and fairly without the awareness of gender or the major of the users.

4.2.2. The Construction of the Corpus of QQ Nicknames

The detailed process of building a closed corpus of the QQ nicknames is as follows. First, all nicknames are filtered and selected to make sure that the nicknames are qualified for this research, and are filed in the TXT document 1. Second, the nicknames are checked in case of possible repetition. Since the QQ system allows many people to share one same nickname and the number of the sample is quite large, two students may happen to use one nickname. If there exists one name used by more than one person, then the name will be eliminated to only one and the difference will be compensated to ensure the richness and diversity of the corpus. In the collection and checking process, there is no such situation, which means that each nickname is used by one only. Third, the list of 255 QQ nicknames is classified into four groups roughly, respectively "In Chinese (Only)", "In Other Foreign Languages", "In Emoji or Pure Punctuations", and "In Blending Characters" and will be stored in an EXCEL file. Thus, visually, all 255 nicknames are set apart. Moreover, considering that in different languages, there exist differences in grammar and expressions, the first-step categorization is necessary for the coming detailed analysis. After this process, further analysis could be given to each group by applying different theories. After the initial comb, we can see 120 nicknames are in pure Chinese characters; 62 nicknames are in English, French, or other languages; 18 nicknames are made up of only symbols like emojis or punctuations, and 55 nicknames are composed of more than one type of characters. In the end, a second check is to ensure that the 255 nicknames in the EXCEL file are the same as those in the TXT file. Pausing at this stage, the condition of the QQ nicknames of Grade 2020 undergraduates at Hohai Universities can be illustrated in Figure 4:
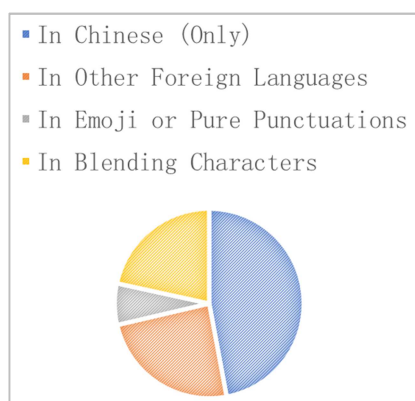

Figure 4. *Types of QQ Nicknames Distribution.*

4.2.3. Summary

In brief, from this pie chart, we can see that the naming in pure Chinese characters takes up nearly half of the 255 nicknames. This is highly related to students' mother tongue habits and their closeness to Chinese. Apart from this, students favor nicknames in other foreign languages as well as in blending symbols. However, in recent years, netizens among which students consist of a large proportion are getting used to the usage of punctuation and vivid emojis, still, only 7.06% of the students would use them as their nicknames. What can be reflected from this result can be explained from the aspect of linguistics.

This result shows that QQ nicknames in complete Chinese characters are the most popular naming strategy for the target group. Therefore, the following analysis will adapt the case study method to illustrate the function of the naming mechanisms in these Chinese QQ nicknames.

4.3. Data Analysis

Based on the ECM, the following analysis is based on the event which can be deemed as the QQ Nickname Event (QQNE). According to the closed corpus of the QQ nicknames, there mainly are two compound models that play their roles in the naming mechanisms of QQ nicknames. For the sake of the simplicity of scenarios, the case study method will be introduced into the analysis.

4.3.1. QQNE+CM₁ Model

For this model to function, we attempt to study the naming mechanisms of the QQ nicknames entailing metaphor. Here is a case study.

The QQ nickname "April Sliced Silk/四月裂帛" is a good case to probe into. The naming pattern is typical. Literally, we can learn that the naming element "time (i.e., April/四月)" refers to the exterior look, and the naming element "Sliced/裂" describes the naming element "condition". The last element is a type of traditional Chinese cloth. Therefore, we can form the nickname's particular naming pattern, which is "time + condition + material", and it is easy to understand that the nickname for a human is structured by a material metaphor. This makes it reasonable to resort to the QQNE+CM₁ Model. After this process, the cognitive framework explained by CEM behind this naming pattern is established, as is shown in Figure 5.
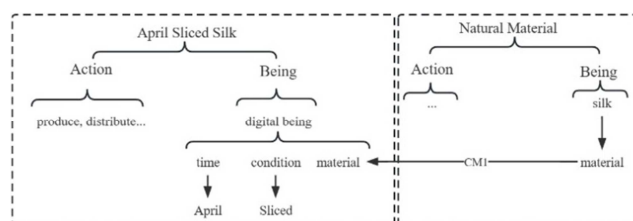

Figure 5. *Application of QQNE+CM₁ Model in Analyzing the Nickname "April Sliced Silk/四月裂帛".*

Similar to this name, the number of QQ nicknames that are made under this cognitive mechanism takes up the largest

proportion according to the corpus. There are altogether 71 QQ nicknames that can be explained under this model, which take up 27.84% of all types of naming.

4.3.2. QQNE+CM₂ Model

To make this model function, we need to bring the metonymy into play. As for metonymy, there lies the correlation within the same domain, which is the QQ user. Here is a typical case to illustrate this model.

For the QQ nickname "Princess Cut Eating Houttuynia cordata Thunb/吃折耳根的公主切", we have the naming element "haircut style (i.e., Princess Cut/公主切)", yet here referring to the person who has the haircut of the Princess Cut, and the naming element "food (i.e., Houttuynia cordata Thunb/折耳根)", indicating the food this person is eating. There are conceivably two actions, respectively cut and eat. Therefore, the naming pattern "state + food + style of haircut" can be acquired. Since the name "Princess Cut/公主切" refers to the concept of a person, we can see that this name is structured in the form of metonymy. In this case, we have the naming pattern that can be outlined in Figure 6:
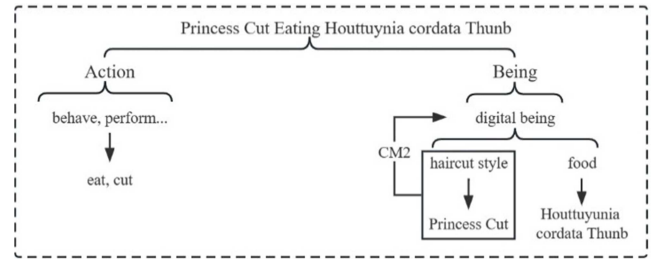

Figure 6. *Application of QQNE+CM₂ Model in Analyzing the Nickname "Princess Cut Eating Houttuynia cordata Thunb/吃折耳根的公主切".*

This naming mechanism is also easily seen, as 43 nicknames fit this model, taking up 16.86% of the 255.

4.3.3. Single Chinese Character Naming

According to the ECM, we need to work out the naming elements of different types of nicknames. For QQ nicknames that consist of only Chinese characters, we have the following six cases out of the 255. In Table 1, the meaning and the part of speech will be illustrated:

Table 1. *One-Character Nickname.*

QQ Nickname	Chinese Meaning	Part of Speech
飒	refreshing; describing the sound of wind	a.
澈	transparent and clear	a.
尧	high	a.
	a wise and capable king in ancient China	n.
川	river; waterway	n.
霁	fog	n.
孓	a type of worm	n.

We can conclude from this table that the one-character nicknames are characteristic of being adjectives or nouns. The noun words refer to naturally existing beings, and adjective words denote a description of pleasing feelings. The simplicity of the one-character nicknames brings the naming mechanism out of the explanation of both models above, yet the function of CM₁ can be found in the nicknames that are considered to be a noun, and the function of CM₂ can be applied to nicknames that are adjectives. Moreover, because of the complexity of the part of speech of one word, this type of nickname allows multiple understandings, which reflects the users' thoughts to some extent.

5. Results and Discussion

5.1. Major Results

This research has made a thorough analysis of the naming mechanism of QQ nicknames of Grade 2020 undergraduates at Hohai University on the foundation of ECM, CM₁, and CM₂. By exploring and comparing the nicknames, we have reached the following results:

(1) In the first stage, 255 QQ nicknames are divided into four sections. 120 nicknames are consisting of only Chinese characters, taking up 47.06%; 62 nicknames are composed of other foreign languages, which is a proportion of 24.31%; 55 nicknames blend different types of symbols and 18 nicknames are completely formed by punctuations, emojis, or other symbols.

(2) Naming elements used in QQ nicknames cover color, haircut style, occupation, shape, social behavior, and so on. Based on the corpus, the naming elements reveal diversity and divergence from a single typical element,

(3) Among the Chinese character nicknames, there are 71 QQ nicknames following the QQNE + CM₁ Model, which takes up 27.84% among all the 255 nicknames. This is the most commonly applies cognitive mechanism underlying naming patterns.

(4) Among the Chinese character nicknames, there are 43 QQ nicknames following the QQNE + CM₂ Model, taking up 16.86% among the 255 nicknames.

5.2. Discussion

At the beginning of the essay, the idea that names can represent the personality, personal character, or other individual reflections has been mentioned. In reality, names are not originally decided by the person who is called the name. Moreover, a certain trend of naming patterns may appear, like in Chinese girl names, for example, the character "萱" or "梓" is repeatedly applied sometimes. However, on the Internet, digital identities are way more diverse and individual. Therefore, from the QQ nicknames, the most popular chatting app in the younger generation of China,

researchers could get a better picture of the characteristics of this group of people in society.

In the process of analysis, all three questions are explained. This part will give a conclusive and general response to the questions this essay deals with. First, the classification of the QQ nicknames and the principle of the classification. This essay divides 255 QQ nicknames into four categories. Based on the different languages used, considering the mother tongue of the users, Chinese is specifically listed as a type, while other foreign languages like French or English also appear in the selection of the nicknames, and the using of Chinese characters takes up the most proportion. The different preferences of language reflect the linguistic culture in reality. As the process of globalization is getting more thorough, language exchange and spread come with this trend as well. In China, one of the necessary sections of children's education is second language learning. Most Chinese kids have their foreign language names in real life. As a projection of their real-life identities, directly using their foreign language names as their QQ nicknames is understandable. Since the naming limit of QQ nicknames is not limited too much, different symbols and characters can be used. Cyberculture and certain trends on the Internet will influence the selection of naming compositions. The use of symbols includes punctuation like period or slash, emojis, etc. Apart from the pure use of a single element, youngsters will combine them together as well.

Second, the major cognitive mechanism behind the naming patterns of the target group. According to the results, the $QQNE + CM_1$ Model is most commonly seen. For a digital identity, forming a personality with the help of a metaphor is relatively simple and easy to understand. A metaphor compares two subjects who resemble each other in a certain characteristic. Using a metaphor also adds to the literacy of a name. The personal pursuit, favor, or other traits are revealed in a reserved way, which makes it interesting to dig into the meanings between the lines. That most Grade 2020 in Hohai University choose this way to name their QQ account reflects the complexity of the youngsters' personalities as well.

Third, the salient feature of the QQ nicknames of the target group. From Figure 4, statistics show that nearly half of the target group uses pure Chinese characters as their QQ nicknames. The single Chinese character pattern, phrases, and even clauses or sentences are all used. This indicates the great influence of the user's mother tongue. If in real life, they are addressed in this language, then on the Internet, they naturally incline to continue the use of Chinese to reveal their individualities. The use of foreign languages follows. This indicates that, even though on the Internet, people are still less willing to divide their digital names from human language. Emojis and punctuations are quite special but in order to form an online identity, they prefer the use of traditional languages and wordings. The content or meaning can be peculiar, but the composition of elements is universally understandable. Cyber expressions like emojis may add to the diversity of the naming pattern, but more tend to blend them with human wordings rather than simply using

an emoji as their nicknames.

In echo with the real-life naming in reality mentioned at the start of this section, the Internet world is way less monotonous. While collecting the 255 nicknames, none of the QQ nicknames repeat. However, in real life, the users' names come similar or even the same from time to time. This is proof that probing into the cyber world may present us with a brand-new panorama of the current social situation.

5.3. Strengths and Weaknesses of the Research

This research illustrates a brief analysis of the QQ nicknames of Grade 2020 undergraduates at Hohai University and provides feasible strategies for further research. However, some improvements can also be made. Here are the strengths and weaknesses of this research.

5.3.1. Strengths
(1) This research limits the target research group within the range of Grade 2020 undergraduates at Hohai University. The target group makes it easy to the establishment of a closed corpus and could include typical samples in the research.
(2) This research creatively introduces the Conceptual Metaphor Theory into the naming mechanisms of people, which provides a perspective for similar research and opens a new angle for online identity analysis.
(3) From the linguistic and cognitive perspective, this essay deals with a social media language phenomenon based on a complete theoretical framework, which makes the study theoretically and methodologically reasonable and feasible.

5.3.2. Weaknesses
(1) Still, only 255 nicknames that are collected could not include all the nicknames. If the condition allows, it is a better strategy to gather as many nicknames as possible to create a bigger closed corpus.
(2) For the convenience of understanding, this essay only presents case studies of the cognitive models, rather than listing all the exact nicknames. In order to better understand the function of different cognitive mechanisms, more examples could be analyzed in future studies.

6. Conclusion

The cognitive mechanisms functioning behind social media nicknames and traditional names share something in common, yet also differ from each other. For Generation Z, social media offers a virtual world that allows various ideas and imaginations to flow, and young people, as they grow up with the development of the internet, project part of themselves onto their digital identities. First, this essay manages to establish two important cognitive mechanisms underlying the naming patterns with the basis of three important theoretical support. Second, it provides original statistics aimed at Grade

2020 undergraduates at Hohai University. Third, this essay concludes the results and discusses the implications and limitations of the research. To sum up, this essay solves the research problems and offers research angles worth consideration. By analyzing the naming mechanism behind their QQ nicknames, we are able to take a glimpse into their reflection on the social reality around them, and by comparisons and contrasts, portray the overall generation feature regarding their attitudes to their online identities.

References

[1] Bhatia, M. V. (2005). *Fighting Words: Naming Terrorists, Bandits, Rebels and Other Violent Actors*. Third World Quarterly, 26 (1), 5–22. http://www.jstor.org/stable/3993760

[2] Evans, V. & M. Green. 2006. *Cognitive Linguistics: An Introduction* [M]. Edinburg: Edinburg University Press.

[3] Jia Yajiao. (2020). *An Analysis of the Naming Mechanism of Celebrities' Nicknames in the Tang and Song Dynasties Based on the ECMM Model from the Perspective of Cognitive Sociolinguistics* (A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree of Master of Arts in English Language and Literature, Sichuan International Studies University) https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD 202201&filename=1020962026.nh

[4] KARDARAS, N. (2016). *GENERATION Z: ONLINE AND AT RISK?* Scientific American Mind, 27 (5), 64–69. https://www.jstor.org/stable/24945499

[5] Lakoff, G., & Johnson, M. (1980). *Conceptual Metaphor in Everyday Language*. The Journal of Philosophy, 77 (8), 453–486. https://doi.org/10.2307/2025464

[6] Lakoff, G., & M. Truner. 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor* [M]. Chicago: University of Chicago Press.

[7] Langacker, R. W. 1999. *Grammar and Conceptualization* [M]. Berlin/New York: Mouton de Gruyter.

[8] Lieberson, S., & Mikelson, K. S. (1995). *Distinctive African American Names: An Experimental, Historical, and Linguistic Analysis of Innovation*. American Sociological Review, 60 (6), 928–946. https://doi.org/10.2307/2096433

[9] Perl, P., & Wiggins, J. L. (2004). *Don't Call Me Ishmael: Religious Naming among Protestants and Catholics in the United States*. Journal for the Scientific Study of Religion, 43 (2), 209–228. http://www.jstor.org/stable/1388123

[10] THE ANNIE E. CASEY FOUNDATION. (2021) *What Are the Core Characteristics of Generation Z?* What Are the Core Characteristics of Generation Z? - The Annie E. Casey Foundation (aecf.org).

[11] Ungerer, F. & H. J. Schmid. 1996. *An Introduction to Cognitive Linguistics* [M]. London and New York: Longman.

[12] Wang Yin. (2005). *Event Domain Cognitive Model and Its Explanatory Power*. Modern Foreign Languages (01), 17-26+108.

[13] Watkins, S. C., & London, A. S. (1994). *Personal Names and Cultural Change: A Study of the Naming Patterns of Italians and Jews in the United States in 1910*. Social Science History, 18 (2), 169–209. https://doi.org/10.2307/1171265

[14] Xiao Chenxing. (2021). *A Cognitive Study on Naming Mechanisms of Chinese Green Tea Names* (A thesis submitted to Foreign Studies College in partial fulfillment of the requirements for the Degree of Master of Arts in the Subject of English Language and Literature, Hunan Normal University). https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD 202202&filename=1022428774.nh

[15] Zhu Wenli. (2020). *A Research on Charactonym Naming Based on the EMS⁺ Model: A Case Study of Call to Arms and Wandering of Lu Xun* (A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree of Master of Arts in English Language and Literature, Sichuan International Studies University). https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD 202201&filename=1020962025.nh