The Performance of Conceptual Metaphors in Different Language Systems

Jiaying Li 1, a, *, and Huizhong Pang 2, b

¹College of Letters and Science, University of California, Davis (UCD), 1 Shields Avenue, Davis, CA, 95616, United States

²College of Literature and Sciences, University of California, Los Angeles (UCLA), 405 Hilgard Avenue, Los Angeles, CA, 90025, United States
a. jygli@ucdavis.edu, b. violant0222@gmail.com
*corresponding author

Abstract: Metaphors are everywhere in people's daily life, and one way to make abstract cognitive systems visualizable is by looking at the language people are using. Language is used as a tool or medium to surface abstract things with figurative concepts or to express two different concepts with a new expression, which is widely used by linguists and people in daily life. Meanwhile, we communicate or express ideas through implicit metaphors in language that also relate to our environment, our own body or mental state, and some linguistic metaphors overlap in different languages. The purpose of the present review is to comparatively analyze several languages and use the view of conceptual linguistics to summarize the relationship between people's cognitive activity and conceptual metaphor in different language systems, including Chinese, English, and Uzbek, and in a different context, including the social environment.

Keywords: Conceptual metaphor, Conceptual linguistics, Language metaphor

1. Introduction

Human brains are good at conceptualizing and categorizing abstract images so that people can better understand information. It is this function of the human brain that was tested in a classic psychological experiment called Prototypes. When a person encounters a new object, he or she will retrieve information from the memory and compare it to the prototypes in the memory. In the experiment, the subjects were asked to learn certain patterns of dots, which includes some prototypes which the subjects later need to differentiate. The prototypes were labelled as capitals A or B, and what is interesting about this experiment is that the experimenter combined abstract dot maps with specific names to form a concept for the brain to remember through associations. Similarly, humans are making and deepening similar connections unknowingly in language learning and applications as well. There are about six thousand languages in existence in the world, and although many of them face great challenges due to their distribution and demographic inequalities, they still have metaphors and meanings in their languages that fit the cognitive patterns of the societies in which they are spoken by native speakers.

Geroge Lakoff and Mark Johnson gave a wide range of examples to reflect that metaphor is a hefty portion using in language expression [1]. According to an article by Haosheng Ye, a professor

^{© 2023} The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

of psychology, "Cognition, body, and environment are one, cognition exists in the brain, the brain exists in the body, and the body exists in the environment" [2]. The source of embodied cognition is determined by bodily experience, so different people may respond and judge differently to the passage of a thing. The subjects in this experiment were mainly native Chinese speakers from China and were all educated as university students, and because the pattern of Chinese language education is normative, they were similar in the extent to which they were subjected to the conceptual metaphor of idioms. Since people learn their first language in connection with their surroundings, family education, and social atmosphere. Therefore, the memory of idioms does not only come from bookish concepts, but also life experiences and personal experiences, "According to conceptual metaphor theory, subjects can experience and process abstract concepts in terms of perceptual-motor experiences" [3]. These different languages also have different conceptions of classification in different languages because different languages have different cultural background frameworks.

2. Cases

2.1. Chinese

Chinese is a language that has had a profound influence on East Asian society and culture, with a long history and development process, and contains many metaphors for words that are still influential in East Asian culture. In the paper written processed by Peipei Tang and Haosheng Ye, the first experiment they designed and conducted is a classical Stroop task, and they use the experiment to test that, as response time and accuracy rate are dependent variables, experimenters could examine the embodied implicit relationship between the concept of power and the dimension of spatial "size" [4]. The first aspect relates language to abstract concepts of power, and the second aspect relates the relationships organized by the first aspect to the conceptually large and small space.

The hierarchy in the concept of power in psychics generally refers to people with higher heights could be more powerful compared to people with lower height. However, putting it in the context of psychology, the definition of power could manifest as "Reduced power is associated with increased threat, punishment, and social constraint and thereby activates inhibition-related tendencies [5]". It can be seen that power as an abstract concept can be embodied by our society, and we can easily gain relevant experience because the environment we live in is closely related to it. In the classroom we implicitly apply the hierarchical concept of power: the teacher speaks from the podium and acts as a facilitator. There is also a similar example of riding a school bus. Students need to show their student cards to the driver, and the driver will guide everyone to the destination. We cannot change the route or frequency of the bus, so the driver-passenger relationship is also somewhat of a hierarchy of power. We can also analyze its place in our embodied hierarchies in terms of what we know to be concepts of power from contextually relevant words.

What is more, experimenters used Chinese words to associate the concept of power. The specific words used are not specified in the paper, but some idioms that contain the word "big" are shown in the description of the paper. We are not sure whether all words contain explicit expressions, large or small, but what is certain is that even without explicit expressions, people can obtain the implicit meaning of words through processing. In this way, the metaphorical relationship between power and space size is expressed and tested in language, which reflects the main characteristics of conceptual metaphor.

2.2. English and Uzbek

English, the language of the second most native speakers in the world, has an important role and significance in the study of language metaphors. In a recent paper by Anvarovna, she compared and analyzed English and Uzbek word-using habit connecting to metaphor meaning [6]. She used an example in English referring to the ladder of success: the spatial image of climbing higher and higher on the ladder can be used to represent a person's promotion or progress in a certain domain. Many web articles have titles like this: "Six Laws to Successfully Climb the Ladder of Success", and "Eight Virtues You Need to Choose to Climb the Ladder of Success". This metaphor appears in Uzbek as well. Such a metaphor could refer to "orientational metaphor", as climbing the ladder is relevant to success in its feature of implying progress towards vertical orientation, and this shows that language can present a figurative behavior, linked to people's abstract activities through its properties

Moreover, the metaphorical model which describes anger as fire is manifesting in both languages. In English, we tend to use phrases like "someone is burning with anger", or "someone's anger is igniting". The above examples transmit the physical features of heat and burning from fire to represent people's certain mental states, or even physical states, such as shivering or a clenched fist. Similarly, the phrase "Uning nafrat to'la nutqi qonimni quynatadi" in Uzbek could be adequately translated to "make someone's blood boil" in English. There are many similar metaphors, which break the differences between cultures and regions and are widely used by people.

3. Comparison

3.1. Common

Language has a unique metaphorical meaning and impact on people from different cultures, influencing their thinking and perceptions in different scenarios. It is difficult for native language speakers not to be influenced by language metaphors, and language grows and is learned through family education, schooling, and socio-cultural influences on language speakers' perceptions and behaviors.

From the English and Uzbek examples, the metaphorical consistency in different languages is fascinating. However, we could not form a conclusion that languages share universal metaphors, since there are about 6,000 languages utilized by people. Nevertheless, the same metaphor in different languages has characteristics that can be summarized, one of which is the effect on the state of our body itself, which is some "universal bodily experience" [7]. For example, when people are happy, our body will become active, conducting motions such as jumping up and smiling. On the contrary, when people's emotion goes down, their body may go into a slow-motion state. Those are the experience people universally share; therefore, it is common for people to derive some metaphor from them. In English, feeling happy could be expressed as "I am feeling lifting", and in Chinese similar meaning presents as "Wo hen gao-xing", and "gao" means high as an adjective.

Japanese, as a language that evolved from ancient Chinese, has also inherited the Chinese expressions and descriptions of imagery, such as the beauty of Chinese poetry in many words, so that readers can feel the mood conveyed by the words when reading them. For example, the Japanese word $5 \, \text{hb} \, \text{loop} \, \text{loop} \, \text{loop}$ is a Japanese word for a sky-coloured light orange at sunset in autumn, and people can feel the environment and meaning behind this word. Japanese imagery is different from Chinese, it has its unique haze and ambiguity, for example, light yellow $5 \, \text{the loop} \, \text{loop} \,$

the love and hope of the nation and represents spring. The cherry blossom is the soul of Japan, it is the faith and trust of every Japanese, people watch the cherry blossom at every festival and write poems with cherry blossom, today, the cherry blossom has become an important symbol of Japan.

3.2. Variation

Different cultures also produce different metaphors, producing different words and their meanings depending on the historical context and the way each language developed. In many cases, one can only truly understand the metaphorical meaning behind a language if one fully understands the culture and the society behind it. Thus, native speakers tend to be more influenced than adult learners of a language in terms of receiving the influence of language metaphors.

Some scholars distinguish metaphors as two kinds of dimensions: the cross-cultural and the within-culture dimensions [8]. Under the category of cross-cultural variation, the idiom "the angry person is a pressurized container" is well-known. Using this metaphor as an entry point, linguists have found that figurative expressions of anger in English expressions are almost always found in Japanese. Also, the word hara is used in Japanese to express anger, meaning belly, and the word only occurs in the Japanese locale. Meanwhile, the article points out that in Chinese culture, people a version of this metaphor in which the excess of qi. Qi is the energy that is constantly flowing in people's bodies, and this concept deeply is rooted in Chinese culture and philosophy. Therefore, the existence of differences comes from the different analyses and understanding that people make from different cultural backgrounds.

It can be deduced from this that when we discuss the performance of metaphors in different languages, we should analyse the specific cultural environment of a specific language as a background. Represented by Chinese culture, the images expressed in its language can be implicit. Take the abstract concept of showing love as an example, linking to five elements, wood, fire, earth, mind, and water, which are considered by Chinese people as the makeup of the world, Chinese ancient poetry adopts internal organs to express love [9]. Yuan Zhen, a poet in the Tang Dynasty, used water as a metaphor in a famous sentence: "Once you visited the sea, it was difficult to enjoy the view of rivers, and except Wushan, other mountains are not worth visiting." The author used this poem as a metaphor for the beautiful and special love between him and his wife: no other love is comparable compared to yours. The sea here is a figurative concept, but it is abstracted by the author for comparison.

4. Impacts

Cognitive linguistics concludes that metaphor is not just a figurative tool for linking two meanings with language, but "a fundamental mental operation that combines two conceptual domains and creates the ability to use one domain to an opportunity to conceptualize a new field [6]". For example, using the concept of power contained in words to study the relationship between the size in space, and resorting to this way could find various combinations and connections which give linguists and cognitive scientists new perspectives to analyze certain structures and conduct meaningful experiments.

Another view from cognitive linguistics is that, through utilizing and enhancing awareness of conceptual metaphors in terms of idiomatic phrases, Japanese English learners could facilitate the learning effect and the acquisition of second language studying [10]. To testify the idea and focus mainly on phrasal verbs, such as cheer up and turn up, the experiment was divided into a traditional approach group (control group), in which students should learn 21 phrasal verbs using the traditional method: simply translate Japanese to English and use a checklist to memorize, and cognitive semantic group (experimental group), in which 21 phrasal verbs were presented to

students based on orientational metaphors embedded in the adverbial particles. What is more, in the experimental group, instructors explained the orientation of the adverbial particle in detail instead of simply translating it, and then including the categorized orientational metaphors, 21 phrasal verbs were written in a new checklist for students to memorize. The result from the experiment supported the idea that when language learners learn new verbs, the use of semantic conceptual metaphor methods is effective, this shows the importance and necessity of conceptual metaphor in linguistics.

5. Conclusion

Regardless of the language, the metaphors brought by the language are always present, especially in the more subtle languages represented by Eastern cultures, which attach great importance to the imagery and meanings behind the language. The metaphor of language influences people's perception of society and culture to a certain extent, and the language they grow up with has a subconscious influence on the cultural context in which they live, even influencing their behaviour and consciousness when they enter society as adults. Some words do not need specific explanations to make people in the current culture feel the meaning of words, which is the role of word metaphors in a social culture that cannot be ignored. All the phases are the same as in a regular sentence, only in a metaphor, the objects are changed to ontology and metaphor. When a language user in the current language context encounters a metaphor, they look for points that connect the two concepts in the context of the words used in the sentence. Therefore, it is not necessary to first arrive at the literal meaning of a statement, realize that it is erroneous, and then infer its hidden meaning without any other interpretation to derive its hidden meaning in this way. While using metaphorical approaches to learning language, language is also the basis of people's cognition of the unknown, giving people from different cultures the opportunity to come up with different results and ideas, and promoting the development of the whole society and culture, "Metaphor is an important means for people to know the world, people understand and feel unfamiliar things through familiar things of a certain kind The metaphor is an important means of understanding the world, in which people understand and feel something unfamiliar through something familiar, thus achieving the purpose of knowing something new and updating the knowledge domain of the thinking structure" [11].

Other extensions of the experiment and related research areas can develop through this central point. Connections can be made to linguistics to study bilingual learning and applications, and the way children acquire language; connections can be made to sociology or anthropology to study the shaping and influence of culture on people's cognition; connections can be made to computer engineering to study the development of artificial intelligence; extensions from the conceptual metaphor of idioms for people to other areas of cognitive psychology research.

References

- [1] Lakoff, G., & Johnson, M. (2008). Metaphors we live by. University of Chicago Press.
- [2] Ye, H. S. (2010). Embodied cognition: A new orientation in cognitive psychology. Advances in Psychological Science, 18(5), 705-710.
- [3] Yin, R., Su, D. Qq., Ye, H.S., (2013). Conceptual Metaphor Theory: Basing on Theories of Embodied Cognition. Advances in Psychological Science, 21(2), 220-234.
- [4] Tang, P., Ye, H., & Du, J. (2015). The Spatial Size Metaphor of Power Concepts: A Perspective from Embodied Cognition. Acta Psychologica Sinica, 47(4), 514. doi: 10.3724/sp.j.1041.2015.00514
- [5] Keltner, D., Gruenfeld, D., & Anderson, C. (2003). Power, approach, and inhibition. Psychological Review, 110(2), 265-284. doi: 10.1037/0033-295x.110.2.265
- [6] Anvarovna, F. A. (2022). Conceptual metaphor universals in English and Uzbek, linguistics, 8(4).
- [7] Kövecses, Z. (2010). Metaphor and culture. Acta Universitatis Sapientiae, Philologica, 2(2), 197-220.

The International Conference on Interdisciplinary Humanities and Communication Studies DOI: 10.54254/2753-7064/3/2022684

- [8] Kövecses, Z. (2004). Introduction: Cultural Variation in Metaphor. European Journal Of English Studies, 8(3), 263-274. doi: 10.1080/1382557042000277386
- [9] Lv, Z., & Zhang, Y. (2012). Universality and Variation of Conceptual Metaphor of Love in Chinese and English. Theory And Practice In Language Studies, 2(2). doi: 10.4304/tpls.2.2.355-359
- [10] Yasuda, S. (2010). Learning Phrasal Verbs Through Conceptual Metaphors: A Case of Japanese EFL Learners. TESOL Quarterly, 44(2), 250-273. doi: 10.5054/tq.2010.219945
- [11] Yun, Y., Changle, Z. (2017). The linguistic formal characteristics of Chinese metaphors and their impact on The Influence of Chinese Metaphors on the Study of Metaphorical Machine Understanding. Institute of Artificial Intelligence, Xiamen University, Xiamen 361005, China