The Metaphor Processing and Translation Skills of Computer Technology in English Language Translation

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Abstract. From the study of language grammar in our country, the metaphor we can understand refers to a form of written expression that is rich in linguistic narrative skills. Going back to the history of ancient literature, we will find that the ancient people's understanding of metaphor is not just a simple way of language description, it is a language form of human active thinking and flexible thinking. I have to say that the use of language grammar can add a lot of color to the article. In the process of English translation, many authors also like to use the grammatical form of metaphor to express the meaning of the article[1]. For the translation of English articles, the form of computer literal translation is relatively simple. However, for English writing similar to metaphorical techniques, whether computer-assisted translation skills can use metaphorical Chinese techniques for translation in time is also a point that researchers should emphasize and pay attention. This article explains some related problems of English-based computer-assisted Chinese metaphor translation from the cultural differences between Chinese and foreign cultures and customs. It is hoped that researchers on English translation can learn from or put forward different opinions.

Keywords: Computer, English Translation, Metaphor, Technique

1. Introduction

When we understand the usage of metaphor language skills in ancient poems in our country, we will realize that the use of metaphors by the ancients is full of poetic flavor. From the perspective of ancient languages, metaphor is a deliberate expression of the meaning of language. Whenever people write articles using metaphorical grammar, such articles often give readers a vague appeal. This appeal not only does not affect the original meaning of the article, it also allows readers to understand the inner part of this article from a deep level. This is also called the infectiousness of the article by some literary people. According to our country’s obscure literature, metaphors in Chinese are mainly used to help people understand the spirit and culture that they want to express in the text.

However, with the increasing influence of Chinese in the world, many foreign scholars have also begun to delve into the knowledge of Chinese grammar. According to a large number of readings of some foreign literary works, we will find that the use of metaphorical grammar in English writing has gradually been developed. However, while we are happy that Chinese grammar knowledge is accepted abroad, we will naturally face the dilemma of English grammar translation. Due to the differences
between Western culture and ours, some people who do not understand foreign cultures cannot guess the general meaning of metaphors in English. Therefore, the study of English translation based on metaphors is also very necessary.

2. The translation characteristics of English metaphors from the differences between Chinese and English

2.1. The difference between Chinese and English metaphorical vocabulary
If we want to explore the source of metaphor, I am afraid we have to go back to the birth of ancient poetry. As the ancients were more proficient in the production of verses, their understanding and application of metaphors were much better than modern people. This is an unquestionable fact. However, in Chinese expression, the use of metaphor can be a sentence or just a simple vocabulary. However, in English, only a complete sentence can guarantee the concealment of the metaphor (see Fig 1).

![Figure 1](image)

Figure 1. Concept map of English metaphor grammar translation.

2.2. The metaphors from the context of different languages
In fact, the concept of context is proposed by our country through the study of ancient languages. In the eyes of foreigners, they have no concept of context. Therefore, in terms of the requirements of the context of the metaphor in Chinese, the use of metaphor can invoke the soothing of the context. The contextual setting can also indicate the superb metaphorical technique. However, in English expression, the metaphor's superiority can be described through context. But it is impossible to relax the context through metaphors.

2.3. Viewing metaphors based on the overlap of English translation and Chinese
When we translate Chinese into English, we will find that there may be many words corresponding. However, when we translate English into Chinese, we will find that an English may only correspond to a Chinese vocabulary with a special contextual meaning. So, if the English expression is a metaphor feature, the Chinese translation is not a metaphor. Then this kind of overlap will destroy the beauty of metaphor.

2.4. Embellishment of translation based on language structure with emotional metaphors
For Chinese, no matter what kind of thinking change is, metaphors can be drawn from the context. However, for English whose grammar and emotional color are relatively rigid, the above-mentioned things are impossible. Therefore, for English translation, we can first establish a context, and then attract metaphorical techniques based on the context.
3. The translation characteristics of English metaphors from the differences between Eastern and Western cultures

3.1. Differences in the expression of Chinese and English languages
In the Chinese language and culture, we will find that when the ancients wanted to narrate things, they generally use metaphors to describe and contrast sideways. The meaning is mainly based on the guesswork of posterity. This can be more mysterious and beautiful. However, for foreign cultures, they are good at making a long story short. In other words, concise and direct language expression is in line with their aesthetics. So for the use and translation of English metaphors, this is a relatively difficult process.

3.2. Differences between domestic and foreign customs
The customs and habits of each region represent the historical process of this region and its various experiences. This is a national culture that emerges from the precipitation of history. Based on the differences in customs and habits between my country and foreign countries, when the metaphorical meaning of English is translated to Chinese, we will find that many problems will arise. Of course, this is also an inevitable natural phenomenon.

3.3. Differences in different technological levels at home and abroad
In the process of English translation, we may encounter many scientific terms with metaphorical features. Due to the difference between the level of science and technology in our country and that in foreign countries, some scientific and technological terms are foreseen because we have not seen or experienced this kind of technology. Then in this translation process, the mistakes of term-based translation will also appear. Of course, this can also be called an objective reason.

3.4. Differences between domestic and foreign history and culture
Throughout the history of our country, the time span of our historical process has exceeded five thousand years. However, the history of many countries abroad is very short. Compared with the accumulation of our culture, the accumulation of foreign history-based culture is also very small. In the translation of historical subjects, the accuracy of this translation may be biased due to different historical cultures.

4. Metaphor processing of computer technology in English language translation

4.1. Metaphorical treatment of English rhetoric
From the study of Chinese grammar, we know that metaphor refers to the use of one thing instead of another for related narration\(^1\). However, the metaphorical form of its presentation is hidden. This latter metaphorical technique is called metaphor. Metaphor is a relatively common technique in English writing. However, translation skills based on hidden metaphors also need to be mastered by professionals. (see Table 1).

| Metaphor processing                  | Explanation                        |
|-------------------------------------|------------------------------------|
| Rhetorical metaphor                 | Analogy                            |
| Cognitive perspective metaphor      | Metaphors from different perspectives|
| Grammatical transformation metaphor  | Hidden metaphor                     |
| Synthetic metaphor                  | A combination of the above three    |

4.2. Metaphorical treatment of Cognitive Perspective
It is a bold idea to observe the technique of metaphor through a different perspective. In the language and culture of our country, metaphors based on high-level cognitive domains are generally used in philosophical thinking. Generally speaking, English articles with this technology are generally
high-level and related to the philosophical system. Generally speaking, this kind of translation requires a computer to perform in-depth database calls, and even manual post-checks.

4.3. *Metaphorical treatment of grammatical transformation*
Many foreign scholars have proposed that the techniques of metaphors can not be limited to vocabulary expressions, they can be interspersed with basic grammar. In other words, such as some English articles that we can't find words that can mark metaphors, but after careful observation, we can find that there seems to be a shadow of metaphor in the basic grammar. Of course, if only from the perspective of auxiliary translation, grammatical transformation is not easy. However, this is also possible in the multiple modes of manual and computer.

4.4. *Metaphorical treatment of compound metaphor*
For the above three forms of metaphor, the last form may be the most difficult translation for computers to recognize. Due to the different meanings expressed in different sentences, each sentence may contain various metaphorical techniques. This is also the most annoying English translation form for translators.

5. Translation skills of computer technology in English language translation

5.1. *Sequential translation based on subject, predicate and object*
The difference between computer translation and manual translation is that we humans can use flexible thinking to transform the semantics of language, while computers do not have this function. Therefore, once the English sentence hides the three subjects, the subject, predicate and object, the computer cannot recognize it[4]. Therefore, in this case, the subject can be manually assigned to computer translation.

5.2. *The use of translation methods for conversion metaphors*
In modern Chinese, the probability of the appearance of metaphorical expressions is still very high. However, in English expression techniques, obvious metaphors have a high probability. Then, if the computer translation cannot identify the metaphorical form of the sentence, we can set up a method of turning the metaphor into a simile and then translate it by computer. Of course, this has higher requirements for the special intelligence of the computer.

5.3. *Translation methods with associated metaphors*
The form of relevance metaphor is very obvious in Chinese writing which is related to religious belief. However, in foreign religious cultures, the form of this metaphor is hidden. In many cases, after seeing a piece of English, the translator may not understand its specific meaning. Then, in this case, it may be that the associated metaphor is at work. What this needs is that we have to associate some foreign religious cultures with computer translation in context.

5.4. *Translation with personalized metaphorical forms*
It is consistent with the writing technique in the ancient poems in our country. This method is generally a metaphorical expression technique invented by using allusions or other historical facts. Then, during the translation process, if the computer cannot recognize this metaphor, the staff can incorporate some historical facts into the computer's translation system. Computers can recognize this personalized metaphor form based on these historical cultures.

6. The main problems encountered in metaphor translation of computer technology in English language translation

6.1. *The neglect of the context of cultural connotation*
The meaning of metaphor refers to the grammatical form of the hidden description. So for foreign
cultures, although they do not have a very long historical process, foreigners are also very good at exaggerating the English context. Therefore, we must not forget the setting of the context brought by the cultural connotation in the process of our translation in English translation\(^5\). This can also help readers understand the meaning of the original text.

6.2. **Unfamiliar meanings of words caused by grammatical changes**

In this title, we can emphasize the change of grammar or the adjustment of context. What we should pay attention to is the appearance of the unfamiliar meaning of a familiar word. For computers, it does not recognize special grammar and context. The language translation it uses is generally a combination of familiar words and familiar translations. So, in the process of computer English translation, the meaning of familiar words is also easy to make mistakes.

6.3. **Contextual English translation**

In fact, according to the common sense of our country's grammar, this problem also arises based on changes in context. In fact, in English articles, the context is relatively small. This is also the reason why the author raised this issue alone. However, this is something we cannot ignore. In the process of using a computer to perform a separate language translation, the first thing we need to do is to look at the context.

6.4. **Translation errors caused by the lack of foreign cultural knowledge**

Perhaps for computers, the frequency of this phenomenon will be very small. However, at present, there are indeed some special and rare foreign cultures that computers cannot contain. Of course, in the translation process, the probability of encountering such an article is also very low. However, this should also be regarded as a part that cannot be ignored in the process of computer English translation.

7. **Conclusion**

For the intelligent mechanical body of the computer, it has the largest encyclopedia knowledge base in the world. It can translate different levels of English articles. But for some linguistic metaphors, there are still many errors in its translation\(^6\). Therefore, the author believes that when the skills of computer translation are not developed enough, we can use manual translation to assist the computer to add the metaphorical language of English translation to make the translation more plastic.

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