Retraction

Retraction: Research on the Translation System of English Cross-cultural Communication based on Computer Technology (J. Phys.: Conf. Ser. 1992 032014)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on the Translation System of English Cross-cultural Communication based on Computer Technology

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Abstract. The development of world economic integration has promoted the cultural exchange among countries. Translation is an important part of cultural exchanges. To do translation well, one must understand the cultural differences between China and western countries. This paper first explains the influential factors of English translation in cross-cultural communication and the research on the translation system of English cross-cultural communication based on computer technology. At the same time, it also discusses the problems that should be paid attention to in the process of computer English translation for readers’ reference.

Keywords: Computer Technology, English Cross-Cultural, Network Technology, Living Habits

1. Introduction

With the development of information technology, information technology has been widely used in various fields. In the process of native and foreign language translation, it is best to conduct cross-cultural analysis and research. Through the use of computer technology, the two languages can be converted, can understand and grasp the cultural differences between the two countries, the English communication translation more accurate.

2. Influential factors of English translation in cross-cultural communication

Translation is cross-cultural communication and the conversion between two languages. Due to the differences between Chinese and Western cultures, translators need to effectively understand and master relevant cultures in advance in the process of translation, and understand that language and culture are closely related and advance together [1-3]. In the process of cross-cultural English translation, due to the differences between Chinese and Western cultures, language expressions and living habits of Chinese and Western cultures will become factors affecting the accuracy of English translation.

2.1. Influence of Chinese and western culture

Culture is not static, it is changing all the time. The symbol of recognition of national and national identity is culture. In fact, the essence of translation is the further explanation and integration of language and culture [4-6]. A particular social culture is manifested in the language of a particular
society, and the cultural characteristics of things, customs and various activities that use this language are also reflected through the different lexical differences of each language. In the course of human development and evolution, the collision of people's wisdom gives rise to culture. From a macro point of view, culture is an ideology, which differs in content and communication methods. In the process of cross-cultural English translation, due to the great differences between Chinese and Western cultures, it is necessary for translators to effectively understand, adapt to and master relevant cultures in advance.

In the process of translation, only on the basis of understanding and mastering culture can translators really grasp the essence of language translation. In addition, the reason why different words have certain cultural deposits and cultural meanings is that they are in different cultural backgrounds.

2.2. Influence of language expression

Language is the reflection of social culture, and culture is the deposition of social development. Social culture always influences people's ideas, thinking and imagination. Influenced by Confucianism, Chinese people are mild and introverted, and their language is more subtle and euphemistic, which are the important characteristics of Chinese traditional culture represented by Confucianism, Buddhism and Taoism. On the contrary, western culture emphasizes personality development, believing that human beings are more important than nature. Westerners are more open, less indirect and prefer to express themselves directly and boldly, and clarify the key points of communication. In The English translation of cross-cultural communication between China and the West, the way of language expression is based on national culture. Therefore, it can be said that the accuracy of English translation depends to a large extent on whether the translator has mastered and understood the Chinese and Western cognitive thinking.

The same. In cross-cultural English translation, due to the differences between Chinese and Western cultures, the politeness principle in language is particularly neglected. English translation that does not pay attention to politeness principle is bound to affect its accuracy (FIG. 1 Differences between Chinese and Western cultures).

![Figure 1. Cultural differences between China and the West.](image)

2.3. Influence of living habits

In order to further enhance the readability of English translation for cross-cultural communication, translators need to understand the differences between Chinese and Western living habits caused by different geographical conditions. Only by carefully interpreting the differences between Chinese and Western life habits can the translation be easier to operate.

For example: greetings in daily life because of the difference between Chinese and Western life habits, greetings are not the same. Although the interpretation of its function is basically the same from the perspective of communicative function, it cannot be blindly equivalent in translation. When they meet, Chinese people usually ask about food, where they are going or what they are doing. The English translation of this greeting should not be translated literally as "Have you had lunch" or "where are you going". Compared with westerners, they often greet each other with "How are you",
"How is everything", or discuss about the weather, books and other things when they meet. When Chinese people ask about dinner, where they are going or what they are doing, we think it is a kind of greeting that we know each other very well and care a lot. However, westerners think it is an invasion of privacy.

3. Research on English cross-cultural communication translation system based on computer technology

3.1. Computer aided translation technology
With the continuous development of computer and network technology in recent years, its influence has penetrated into every aspect of people's life. Computer Aided Translation (CAT), similar to CAD, helps translators perform translation work on a quality, efficient and easy basis. Different from the previous machine translation software, it does not rely on the automatic translation of computers, but completes the whole translation process with the participation of human beings. Compared with human translation, translation efficiency can be more than twice as high if the quality is the same or better. CAT automates the heavy manual translation process and greatly improves translation efficiency and quality. Computer-aided translation is a broad and imprecise term that covers a range of tools, from very simple to more complex. In the process of translation, the known translation methods include the broad sense and the chivalrous sense. Chivalry translation matches the required words through translation memory, and records some words in the translation process, enabling the translator to carry out computer-aided work through the computer. In the broad sense, translation completely changes every working link in the translation process, making it basically achieve a fully autonomous translation level for word count, resource allocation, term identification, format conversion and fuzzy matching peer operation (figure 2 Google translation).

3.2. Research on the application of COMPUTER-aided translation technology in the translation system of English cross-cultural communication

3.2.1. Workflow before, during and after translation
The CAT work can be divided into three stages: pre-translation, mid-translation and post-translation. First, pre-translation activities include filtering the format of the original text and segmenting (cutting the text into paragraphs according to the SRX Segmentation Rule eXchange). The establishment of a memory bank for the original text and the existing translation. In translation, pre-translation is carried out with the help of memory bank and terminology bank to determine the matching rate (perfect match
and fuzzy match) and the actual amount of translation, and to ensure the unified style and correct expression of translation. After translation, quality assurance, desktop typesetting, corpus recycling and management are completed to ensure that the products meet the requirements.

3.2.2. Main Technologies
The main techniques include parsers, perfect and fuzzy matching, context matching, related search and sentence breaking rules, and corpus alignment.

The parser is a memory store embedded file format parser, can directly handle the HTML/SGM/SML/re/.tf/Word/Frame Maker and other mainstream file formats. For example, SDL Trados, Wordfast, Yeekit and other specialized development of XML file format parser. XML Extensible Markup Language (XML), like HTML, is a markup language that relies on tags that describe certain rules and application processing tools that can read them. CAT tools express headings, paragraphs, tables, text formats and other formats as markup symbols. Translators only need to keep relative positions when translating.

3.2.3. The working principle of perfect match and fuzzy match is decision memory
There are two kinds of matching results between the existing sentence paragraph and the one to be translated in the library, namely perfect match and fuzzy match. Perfect match means that the updated source file is exactly the same as the corresponding old bilingual document set in terms of spelling, punctuation and sentence changes, and is displayed as 100%; If CM is displayed, the two documents are identical above and below on the basis of a perfect match, that is, a context match. The matching rate between 1% and 99% theoretically becomes fuzzy matching, and there is a cut-off point, below which there is no enough available content in the translation. The cut-off point is "fuzzy matching threshold", which can be set automatically, and the appropriate setting can improve the efficiency.

Context matching takes into account the context of the translation unit, except that it is 100% matched and the context of the two paragraphs must be the same.

When you add a new translation to the memory bank, you actually add a sentence paragraph from the source document. The sentence paragraph translation and the sentence paragraph before the sentence paragraph from the source document are three sentence paragraphs. This type of paragraph does not require editing.

The standard for the exchange of broken sentence rules is LISA based on THE XML standard: text block processing rules uniformly published for various localized language processing tools, which aims to realize the convenient processing and conversion of different applications and TMX documents in memory library.

The last application technique to be explained is corpus alignment, which refers to the process of building a memory bank based on existing translation resources. Automatic alignment can't avoid sentence division and sentence order adjustment, so it needs manual intervention. By aligning existing translation materials, accumulated resources that have not been translated by the TM system can be incorporated into the TM system for future use. In summary, the role of CAT tools is to reuse language assets, control translation quality, simplify translation formats, assist in translation collaboration, and assist in translation management (Figure 3 translation using computer technology).
Problems that should be paid attention to in computer English translation

Computer English translation requires us to pay attention to the translation of professional terms and the use of some translation skills, to master the same thing in English and Chinese expressions. Since computer English belongs to the category of Science and technology English, and most of the science and technology English emphasizes conciseness and conciseness, attention should be paid to the logical relationship and expression sequence in translation, and the method of sentence breaking should be adopted according to the logical relationship in translation, so as to translate complex sentences into simple ones. The postpositive attributive should be dealt with reasonably to make it conform to the expression habit in Chinese. The specific points for attention are as follows:

First, in the process of translating computer English, foreignization should be adopted as far as possible. Because in the process of translation, it is difficult to find ready-made words corresponding to computer vocabulary in Chinese, so some words will be self-translated or transliterated. For the mushrooming vocabulary, the metropolis uses transliteration until it is unable to find a suitable Chinese equivalent.

Second, in the field of English translation for science and technology, a common problem is that "oneself know" and "others know". Some people think that when they know something, others know it. "Self-knowledge" refers to the mastery and research of professional knowledge, while "others know" is the display of the translator's mastery of language. Pure learners can stay on their understand level, but if it is to the mass communication computer English frontier knowledge of computer professionals, minus the western tip of computer knowledge into Chinese spread to all aspects of social responsibility in our country, have to think about the content of good or bad, and what are people looking at these words. The translation in the field of computer science should follow the principle of reader first, not make the reader fall into the far-fetched jargon like a fog, but make the reader find the technical essence with rules to follow.

4. Conclusion

To sum up, the application of computer technology in the study of English translation system for cross-cultural communication can enable readers to complete the translation work with high quality, accuracy and efficiency. Therefore, the application of computer technology should be strengthened in the study of English translation system for cross-cultural communication, so as to promote the study of English translation system for cross-cultural communication.

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