Discussion on the Problems of Computer Assisted English Translation

Fucong Lai¹*, Qing Wan¹
¹Foreign Language Department, Ganzhou, Jiangxi, China, 341000

*Corresponding author e-mail: laifucong@ganzhsz.cn

Abstract. As a mainstream subject, English is the second category of linguistics which is attached great importance to in China. English translation is a form of language connection between Chinese culture and international culture [1]. With the continuous progress of today's computer technology, the emergence of a huge amount of translation makes the efficiency of old manual translation reach the upper limit. In order to meet the social needs of English language translation, scholars put forward the form of computer-aided translation. Through a lot of practice, it is found that this form of translation can greatly improve the efficiency of English translation. However, it gradually in the use of various problems also appeared. This paper briefly describes the advantages and disadvantages of computer-aided translation. On this basis, this paper also puts forward some strategies to solve the problem.

Keywords: Computer, Auxiliary Translation, Problems

1. Introduction

As a strong language discipline, English learning has always been paid more attention by the education circle in China. In the selection of social applied talents, English translation ability is also a specific form of investigation [2]. However, in today's society, the exponential increase of all kinds of data information has caused a huge impact on the traditional manual translation. The efficiency of human translation can not be applied to information translation nowadays. In order to meet the needs of English translation of social information, computer-aided translation has been put forward. In the face of the dramatic increase of information translation workload in the language service industry, the function of auxiliary translation is really concerned and loved by people (see Figure 1).

However, everything in the world has two sides. Computer aided translation helps people improve their work efficiency. At the same time, it also adds the disadvantages of low translation accuracy to these advantages. In front of people who don't know English grammar, the function of auxiliary translation is like a translation robot without any flaws. However, compared with manual translation, we will find that the use of machine translation grammar is not appropriate. In the process of Chinese English translation, the use of words will be inaccurate in machine translation. This paper aims to help readers know the advantages and disadvantages of machine translation through a comprehensive understanding of auxiliary translation. Finally, this paper also puts forward the corresponding strategies to solve the problems of computer-aided translation.
2. Theoretical research on computer aided translation

2.1. The history of auxiliary translation
The early prototype of auxiliary translation is machine translation. Because the efficiency of early manual translation is very low, on this basis, people put forward machine translation. However, at that time, the errors of machine translation were very large, and its translation efficiency was incomparable with the current auxiliary translation. Later, after a lot of researchers continue to update the technology, today's computer-aided translation technology has been mined out.

2.2. Specific definition criteria
We believe that computer-aided translation is a unique language translation technology. According to the difference of translation ability, this technology is divided into two forms. It includes broad translation technology and narrow translation technology. General translation refers to the daily translation system of electronic dictionaries. Narrow sense translation refers to a translation system designed for English translation with a database of professional terms.

2.3. Introduction of functions based on computer aided translation
The early prototype of machine translation has a single function design. It can only translate a single source text. Later, people discovered the complexity of language translation. In the design of today's auxiliary translation system, the functions of word processing, the conversion of source language and translation, and the translation of picture text are added. There is no doubt that the application of these functions will enhance the auxiliary translation system to a higher level.

2.4. Complementary technologies of auxiliary translation and manual translation
In fact, the application of auxiliary translation in life should be divided into two forms. The first is computer-aided manual translation. Its abbreviation is cat. The second is the form of artificial computer translation. Its abbreviation is Mt. The former involves human translation. The latter's work is completely dependent on the computer to complete independently. However, due to the lack of accuracy of computer-aided translation, people usually use the first form of translation.

3. Insight into the application of computer aided translation technology from practice

3.1. Format conversion of source files
We know that there are many kinds of files in computers. The file format of the original translation
that can be received by the computer-aided translation system must be text format. Auxiliary translation technology can convert other formats of documents into text format. If the original text exists in the picture, the auxiliary translation technology can also use the image scanning technology to transform the original text in the picture into text format for translation operation.

3.2. Application of Translation Terms
In the process of English to Chinese translation, the computer can transform the English vocabulary of the original terminology into the Chinese term form for expression. In the process of Chinese English translation, the computer can also convert Chinese terms into English terms. In this process, the computer can also maintain the fastest translation efficiency. In addition, translators can also set up an independent term bank for the application of translation (see Table 1).

3.3. Error checking and modification of manual translation
In many cases, English articles with few words can be translated manually. However, the error of manual translation is relatively large [3]. When the manual translation is input into the auxiliary translation system, the translation system can use the internal error correction mechanism to check and correct the translation errors. It includes the correct spelling of words, the correction of grammar and the addition of professional terms.

3.4. Conversion of phonetic translation
The application of this function is generally used in our daily communication with foreigners. If there are obstacles in the language communication between us and foreigners, we can use the mobile phone's auxiliary translation software for voice translation conversion. We speak Chinese to the mobile phone, and the mobile phone can automatically convert Chinese into corresponding English for playing. This function is also a practical auxiliary translation of daily language developed in recent years.

4. Discuss the advantages of computer aided English translation system from practice

4.1. Efficiency improvement compared with manual translation
Traditional English translation is the manual translation of a large number of English articles by many people. Because everyone's translation style is different. At the end of the formation of the translation, appropriate polishing should be carried out. Compared with the complex manual translation, the auxiliary translation system can carry out fast English translation. It can ensure the consistency and comprehensibility of the lexical style of the translation. Most importantly, its translation efficiency is extremely high.

Table 1. A comparison of the characteristics of traditional manual translation and computer-aided translation.

| Low efficiency | High efficiency |
|----------------|-----------------|
| Low accuracy   | Medium accuracy |
| The inconsistency of translation style | Memory and term base |
| Waste human and material resources | Machine instead of labor |

4.2. Application of memory and translation reference
There is a memory bank in the system of assisting English translation. Every time we use the auxiliary system for translation, at the same time, the system will do a good job in the translation backup work. When we translate the similar original text again, the auxiliary system will provide the previous translation template as the translation reference. This function can save a lot of time of human assisted translation.
4.3. Establishment of professional term database
Each auxiliary translation system has its own professional terminology library. The system will call the data in the term base itself when translating specialized terms. Moreover, fortunately, the auxiliary translation system supports users to build their own terminology database. This function is very helpful for students who are used to writing scientific research articles or academic articles. It can provide people with a more professional form of translation.

4.4. The use of different types of English Vocabulary
In fact, there are many kinds of English in the world. It includes British English, American English and Indian English. The writing and translation of some words in different kinds of English are different. The auxiliary translation system can use different forms of English words according to the user's requirements. According to the different pronunciation, the translation can be changed into voice and played out.

5. Discuss the shortcomings of computer aided English translation system from practice

5.1. The accuracy of vocabulary use in translation is low
English and Chinese require high accuracy in the use of vocabulary. It is similar to Chinese. It also includes adverbs of degree, frequency and relation [4]. At present, the accuracy of the use of words in the translation based on the auxiliary English system is very low. Most of the time, due to the differences in the use of words, the meaning of the translation will become different. This is a fatal deficiency (see Table 2).

5.2. It is not enough to polish the translated version
Chinese-English has always been a symbolic word for foreigners to laugh at Chinese people. However, many of the software for assisting translation is immature. Their translation is very rigid. In the process of using the function of Chinese English translation, Chinglish is frequently used. This also leads to a lot of translation can not be directly adopted by people. The main point of this shortcoming is that the translation is inadequate.

Table 2. Problems encountered in the use of computer-aided translation and the countermeasures.

| Problem                               | Strategy                      |
|---------------------------------------|-------------------------------|
| Imprecise use of vocabulary           | Demand for technological innovation |
| The translation can not be used directly | Arrangement of writing format  |
| Not able to distinguish rhetoric       | Above all                     |

5.3. It is difficult to identify Chinese rhetorical devices
Chinese English translation is one of the most commonly used auxiliary translation methods in our daily life [5]. However, we will find that it is difficult for the auxiliary translation system to identify the original Chinese text with rhetorical devices. This will make the translation unable to express the original description of emotion. Moreover, this kind of translation lacks logic and coherence. The common rhetorical devices that are not recognized by the auxiliary system include metaphor, metaphor and inversion.

6. Supplement to the disadvantages of computer aided English translation system in use

6.1. Attention to the writing format of the original text in regular use
This strategy is mainly applicable to the process of Chinese English translation. In the process of compiling the original Chinese text, we should try our best to reduce the use of complex rhetorical devices. Subject, predicate and object should also be used in the normal Chinese order. In addition, we should also reduce the use of professional terms. Finally, we must use punctuation correctly.
6.2. Developers should update the auxiliary translation software regularly
As a matter of fact, all the shortcomings mentioned above are put forward on the basis of computer technology [6]. If the software developers can regularly update the software technology and vocabulary, these problems will naturally disappear. However, from the technical level, China should learn more from the advanced technology of foreign auxiliary translation system.

6.3. It is necessary to introduce talents for the design of translation system
The fact is that only technological innovation can perfectly solve the various problems in the process of auxiliary translation. However, it is difficult to innovate computer translation technology in China. Due to the shortage of application-oriented talents, the auxiliary translation system has not been able to get sufficient technical updates. Therefore, China must strengthen the training of application-oriented talents for translation system design. The educational circles must pay attention to this problem.

7. Conclusion
Computer aided translation does provide us with great convenience. Success, however, is always accompanied by side effects. Although it also has many shortcomings, we must try our best to find ways of technological innovation. We should learn foreign advanced technology of auxiliary translation, make use of it and innovate our old technology.

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