The Application of Computer Aided Translation in Practice——Taking the Chinese-English Translation of Tourism Texts in Hetao Region as an Example

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Abstract: This article analyzes the characteristics of the Chinese-English translation of tourist texts in the Hetao region and computer-aided translation. The author combines the practical application strategies of computer-assisted translation, including the pre-translation, the translation matching work, and the post-translation inspection work to study the relevant content in the tourist text examples in the Hetao region. The purpose of this article is to improve the application value of computer-assisted translation and improve the accuracy of translation.

1. Introduction
Computer-aided translation was put forward relatively early, but it remained at the conceptual stage in the early stage. As computer technology continues to mature, computer-assisted translation has also begun to enter the stage of practice, and it also provides necessary technical support for the rapid rise of ideas. At this stage, translation software is used in many fields, which also provides a lot of application convenience for knowledge learning. Applying computer-assisted translation to tourist texts in the Hetao region can not only save translation manpower input, but also help improve the reliability of translation.

2. Features of English Translation of Tourism Texts in Hetao Region
The Chinese-English translation of tourism texts in the Hetao region belongs to the translation of urban publicity. It will introduce the natural, cultural landscape, history, culture and folk customs of Hetao region to the outside world. In order to meet the requirements of tourists to quickly obtain data and information, the Hetao tourist text needs to be easy to understand, so that it can be used by users of different cultural levels [1]. Moreover, the use of words in the Hetao tourism text also needs to reduce the use of some abbreviations, so that people can understand the translation text easily. In addition, in terms of syntax, the Hetao tourism text should use as many simple sentences as possible to make the structure content simpler and clearer. In this way, the key content of the text is reflected in the manual to meet the understanding of tourists in different regions [12].

3. Overview of Computer Aided Translation
Computer-aided translation generally refers to a technology that uses translation memory matching methods to improve translation efficiency. Simply put, it is to complete the simple and repetitive mechanical labor in translation work by simulating the mechanism of human brain memory by
computer. The liberation of translators by the "machine-assisted translation" model can make translators pay more attention to the deeper meaning of translation. Translation memory is the core component of computer-assisted translation technology. In actual translation work, translation memory can assist translators by automatically identifying and matching recurring content. The matching degree is displayed as a percentage to provide complete matching and fuzzy matching. Translators reuse language assets according to the content of the memory bank, which can greatly save translation time and cost. Through computer-assisted translation, the relatively fixed text structure in similar projects can tend to be consistent, and it can be directly reused when translating such projects in the future [3].

4. Application Strategy of Computer Aided Translation in Practice

4.1 Preparation Before Translation
When finishing the Chinese-English translation of tourism texts in the Hetao region, translators need to do some basic preparations first. As shown in Table 1, in the computer-assisted translation process, many extended words and derivative words in the software are used. The translator needs to transform the format of the data information according to the actual situation. The translator not only needs to extract some terms and vocabulary, but also needs to build a corresponding memory bank. After completing the format conversion, the translator can transform the text into a state that can be translated and edited. For example, if there is an html format file in the text, the translator can use SDL Trados to open it during translation. And some files in image format or PDF files need to be processed with Abbyy Fine Reader. This can save 60% to 70% of the compilation time and speed up the work progress [4].

Table 1 The Use of Extensions and Derivatives in English Translation

| Extension       | Derivative        |
|-----------------|-------------------|
| Hub             | De+bug=Debug      |
| Switch          | Explorer          |
| Router          | Narrator          |
| Network Bridge  | Sub+net mask=Subnet Mask |

4.2 Do A Good Job of Translation Matching
In the process of translating the text, the advantages of the previously established memory bank will also be fully utilized. If there is some repetitive content in the translation process, the memory bank will extract this information directly into the translation area, and the translator can directly use it. For some fragments with high similarity, the memory will also add these contents to the translation area during translation, and the translator can refer to them. Moreover, every time the translator completes the translation of a sentence of text during the entire work process, the translated content will be added to the translation memory as its corpus. In this process, SDL Trados tools can also be used to assist the work. Some four-character words will be used in the travel text for text rhetoric, and these contents will basically not have matching content in the document. At this time, with the help of computer-assisted translation, evaluating the edited translation and using it after confirming it can reduce the occurrence of translation errors [5].

4.3 Check After Translation
The auxiliary translation system will continue to play a quality control role after the completion of the computer-assisted translation work. During translation, the auxiliary translation system will not only...
scientifically evaluate the accuracy of the translated content, but also use the quality control function of the software itself to verify the translated content during the process. The content to be checked includes vocabulary usage, spelling accuracy, text format, etc. The auxiliary translation system will unify the terminology usage after verifying the basic content, and will also check for translation errors, translation omissions and other issues. With the help of computer-assisted translation, not only can the translator's time and cost investment be saved by more than 80%, but the accuracy of the inspection results is stronger. Translators can also take advantage of this time to connect the content of pragmatic norms. Furthermore, after exporting the translation, the translation-assisted translation system will keep the format of the translation consistent with that of the original text, thereby saving the time and cost of reformatting the article [6].

5. Analysis of Practical Application Cases

5.1 Original Presentation
Bayannur is a emerging city in the western region of the Inner Mongolia Autonomous Region. ‘Bayannur’ is a Mongolian language meaning ‘Fertile Lake’. It is located on the world-famous Hetao Plain and Urad Grassland, it borders the steel city of Baotou on the grasslands to the east, Alxa League, to the west, and to the south, it is separated from Ordos by the Yellow River, neighboring Mongolia to the north. Bayannur has convenient transportation and communication, dry climate, low temperature, abundant natural resources and unique tourism resources. It is the place where the swan goose takes off and the hometown of Chinese dinosaurs, known as the ‘fertile land in remote area, the Pearl of the Yellow River, New Town in the North, and Hot Land in the West.’

5.2 Translate Region Name
In the process of translating the sentence "Bayannur" in the Mongolian language, meaning "rich lake", the literal result of computer-aided translation is Bayannur is a Mongolian word meaning 'Lake Lake', but the result of this literal translation is lacking some cultural charm. For example, "Lake Lake" should be modified and translated into "Fertile Lake". In this way, the entire sentence is retranslated as ‘Bayannur’ is a Mongolian language meaning ‘Fertile Lake’. After the translation is completed in this way, the richness of the vocabulary has also been effectively improved [7].

5.3 Second Test
In the second test of the sentence, you can pick out the sentence "It is located in the world-famous Hetao and Urad grassland, its east is Baotou, and the west is Alxa League," the sentence is translated and verified [8]. The result of literal translation using computer-aided translation is “It is located on the world-famous Hetao and Urad steppes, adjacent to Baotou in the east, it is bordered on the West by Alxa League”. In this way, the translation lacks some flexibility. In this regard, in the specific translation process, the translator needs to translate according to the cultural characteristics of our country. The translator will adjust it into ‘It is located on the world-famous Hetao Plain and Urad Grassland’. After adjusting a few words, the readability and momentum of the content can be improved [9].

5.4 Software Application
In this translation processing, the main computer-aided translation software used is ‘Trados’. Using the software to transform the format of data information, translators not only need to extract some vocabulary terms, but also need to establish a corresponding memory bank. After completing the format conversion, the translator can transform the text into a state that can be translated and edited. When translating ‘Western hot land’, the literal translation result is ‘the Western hot land’. This will lower the grade of the translated content, but there is no corresponding content in the corpus. The translator can combine the previous vocabulary accumulation and regard it as 'Hot Land in the West', so that the overall translation effect can be effectively improved [10].
5.5 Treatment of Special Words
In this article, the main special vocabulary faced is some four-character vocabulary. Such as a dry climate, low temperatures, the northern new town, etc. Take the term "a dry climate" as an example, the translation result in direct translation is "dry climate". At this point, the translator needs to optimize it. The translator can use the inversion method to adjust the "dry climate" to "dry climate". Just as the result of the literal translation of "low temperatures" is "low temperature", in order to show the symmetry of the vocabulary, the translator can extend the term "low temperature", such as "temperature is low". This method helps to improve the practicality and effectiveness of the analysis results [11].

5.6 Verification of Translation Results
After completing the computer-assisted translation work, the translator can use the software's own quality control function to check the translated content. Check content includes vocabulary usage, vocabulary spelling, text format, etc. After verifying the basic content, the translator will unify terminology usage. Otherwise, the translator will check some texts for translation errors and missing translations. At the same time, the translator will also adjust some word orders [12]. Combining the above content, the final translation result is 'Bayannur is an emerging city in the western region of the Inner Mongolia Autonomous Region. 'Bayannur' is a Mongolian language meaning 'Fertile Lake'. It is located on the world-famous Hetao Plain and Urad Grassland, it borders the steel city of Baotou on the grasslands to the east, Alxa League, to the west, and to the south, it is separated from Ordos by the Yellow River, neighboring Mongolia to the north. Bayannur has convenient transportation and communication, dry climate, low temperature, abundant natural resources and unique tourism resources. It is the place where the swan goose takes off and the hometown of Chinese dinosaurs, known as the‘fertile land in remote area, the Pearl of the Yellow River, New Town in the North, and Hot Land in the West.'

6. Conclusion
In summary, the accuracy of translation is also constantly improving while the update speed of translation software continues to increase. Especially in the context of economic globalization, cultural exchanges between regions are constantly improving. In the English translation of tourist texts in the Hetao region, the application of computer-aided translation can not only optimize the translation content, but also play a positive role in improving the reliability of the translation.

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