

---

# Analysis Report on the Creation of Data Base and Translation Memory Based on Trados 2015

Bingqian Zhou <sup>a</sup>

School of North China Electric Power University, Baoding 071000, China.

<sup>a</sup> 751510097@qq.com

---

## Abstract

Taking the 2015 version of Trados software as an example, this paper expounds the basic process of creating a translation memory and a term base, as well as the problems encountered in the process, and puts forward some personal solutions. At the end of this paper, the advantages and disadvantages of machine translation are discussed, and the viewpoint of combining manual translation with machine translation is put forward.

## Keywords

Data Base, Translation Memory, Machine Translation, Trados.

---

## 1. Introduction

The rapid development of information technology has developed the wings for the development of translation technology and tools. The globalization and commercialization of the language market have further increased the huge demand for translation technology, and the translation technology and tools have developed greatly in the last 5 years. [1] A series of translation enterprises, such as Trados and MemoQ, have developed rapidly and occupied a large market share. [2] In the field of machine translation, translation memory and term base occupy a particularly significant proportion. Therefore, based on the 2015 edition of Trados software, this paper explores the process of making and applying the translation memory and the term base, expounds the relevant operation steps, and analyzes the problems encountered in the process and their solutions.

## 2. Ceation of Data Base and Translation Memory

### 2.1 Creation of Data Base

#### 2.1.1 Excel Table Creation

First establish a excel table, and then enter Chinese in a column on the left, English in column b on the right. Then, empty out the first row of the table, type Chinese in the left A1 cell, enter English in the right b1 cell, and then save it.

#### 2.1.2 Table Format Transformation

To convert a excel table to a recognizable file of SDL MultiTerm 2015, the following should be done. First, successively click: “Start”--“All Programs”--“SDL MultiTerm 2015”--“SDL MultiTerm 2015 Convert”. After entering the interface of MultiTerm, click on the “Next Step” twice, and then go to the “Conversion Options” interface. Select the Microsoft Excel format, click “Next”, and go to the “Specified File” interface. Then, select the “Previously Saved Term Excel” file, the “Corresponding Saved Address”, entering the “Specified Column Header” interface. And then select the first language field option for each language, as well as select the corresponding language. Finally, the term conversion process has been completed.

### 2.1.3 Creation of Term Base

Click on the SDL MultiTerm 2015 Desktop icon, and then "File"--"New"--"Create Term Base" in turn, we can enter the Create Term Base interface. Select the save location and name under this interface. Then go to the Wizard interface, click "Next" twice, entering the Term Base Name interface. Under this interface, add "user friendly name", "description" and "copyright information" to the glossary, then click "Next", going to the "Index Field" interface, in which select the language type corresponding to the glossary. Then, the creation of Term Base is completed.

### 2.1.4 Import Term Base

Click on "File"--"Import and Export", importing the term base, and also select the corresponding xml format file. Then, click Quick Import (fully compliant) to complete the import of the term base. However, this only applies to the correct term base format. If there are a few errors including format error and so on, instead of clicking Quick Import (fully compliant), please click "Next", and then select the storage location for non-conforming dispatch files.

## 2.2 Creation of Translation Memory

### 2.2.1 Bilingual Document Creation

The alignment operation is based on the existing bilingual documents. Therefore, we need to divide the translated documents into two documents, one in Chinese and one in English. And adjust the format in Chinese and English to ensure that paragraphs and carriage return correspond one by one. Because the Trados translation memory recognition process is based on the return character and the period, if the return of the two documents is not strictly corresponding, or the period format has problems, it will increase the workload in the follow-up process.[3] And in the 2015 version of Trados, n: n match operation can only finish 3: 1, no more than four alignments.

### 2.2.2 Creation and Import of Alignment File

Select SDL Trados Studio 2015 icon, click "home page"--"align a single file pair", and then add the translation memory, the original text, the target text, entering the interface of alignment. According to the alignment accuracy of the right and left sentences, confirm or delete join lines respectively. Then, select the alignment editing mode to rematch and edit the alignment file.

After these, export the aligned file and then import them into the translation memory. You can also click on the "Import Translation Memory" at the top of the interface, select "Advanced Import"--"Create"--"Create New Translation Memory", fill in the name, and then select the corresponding language. Finally, the aligned file is imported into translation memory.

### 2.2.3 Derivation in Common Format TMX

Considering that the translation memory is based on sdltm format, which does not match with other sorts of translation software. Therefore, we can choose to export translation memory in TMX format, after the creation of the translation memory.

## 2.3 Import Translation Project

Click the SDL Trados Studio 2015 icon, select the "New Project" option in the interface of file or welcome or project. Then, create a name for the project; choose whether to publish to the server and the corresponding language. Additionally, import translation files, memory, and term base. Whether to use project preparation leads to different results. It should be noted that if you select "Do not use project TM preparation", the memory function cannot be used after entering the project, but the term library can still be used; if "pre-translate back and forth transmission" is selected, pseudo-translation content based on memory bank content appears in the translation interface when the translation item is opened.

### **3. Problems and Solutions of Creation Processes**

#### **3.1 Problems and Solutions in the Process of Making Term Base**

1. In the process of creating the Excel table of the term base, the corresponding languages must be typed in the first line of the Chinese and English terms. Otherwise, there will be a series of errors since the machine cannot automatically recognize the terms when they are converted and imported.
2. After the creation of the Excel table of the term base, you must use SDL MultiTerm 2015 Convert for format conversion. Otherwise, you will not be able to import them directly as the file will not be recognized.
3. In the process of creating the date base, please ensure that all the steps of choosing corresponding language are correct and consistent. Otherwise, the inconsistency of the language will lead to the unrecognizable situation in the subsequent import process.

#### **3.2 Problems and Solutions in the Process of Making Translation Memory**

1. In the process of creating bilingual documents, the initial format should be processed based on the one-to-one correspondence as far as possible. Otherwise, it will increase the workload of the subsequent alignment process, since Trados 2015 can only align no more than 3: 1 sentences.
2. The storage format of the translation memory is sdltm, while the common format of exporting the contents is the TMX. Files with sdltm format can be opened directly with trados, but files with TMX format need to be re-imported to re-establish a new translation memory for uses.

#### **3.3 Problems and Solutions in the Process of Creating Translation Projects**

1. It is necessary to select the correct corresponding languages in the course of project creation. If an error one is selected, the files will not be recognized.
2. Whether the project preparation and pre-translation are used in the process of creating a translation project will affect whether there is a matching translation in the corresponding translation. If the pre-translation is not selected, there is no translation content in the corresponding translation interface.

### **4. Advantages and Disadvantages of Machine Translation**

#### **4.1 Advantages**

1. Machine translation reduces translation costs and shortens delivery time. With the aid of machine, term base and translation memory, translators' workload is greatly reduced. [4]
2. Machine translation can provide translation at any time. The machine translation system can be implemented at any time without waiting for a long time. However, translator may be constrained by time, place and other factors.
3. Using machine translation can better maintain the consistency of the translation as a whole. The term base in machine translation can guarantee the consistency of the full text terms. At the same time, machine translation does better in punctuation, format and other related checks, than manual translation. Even after specialized training and corresponding management mechanism, it is still difficult to maintain the same consistency and accuracy of machine.

#### **4.2 Disadvantages**

1. To a certain extent, machine translation reduces the accuracy and readability of the translation. The machine often fails to grasp the meaning of words and passages well, and cannot accurately translate the meaning of the original text according to the actual needs of the text and context. Therefore, it often causes errors of word analysis, misinterpretation and leakage of the translation. [5] In addition, the articles produced by Machine Translation are not available.

2. The machine is very poor in identifying sentence structures. It is difficult to identify the structure of a sentence. At the same time, the ability to recognize various kinds of modifiers and elements such as phrases, clauses, non-predicate verbs is also poor. In this case, machine translation tends to be rigid and incompetent, since it is only based on the input information. It cannot be flexibly used in grammar, cannot be judged correctly according to context, and cannot handle some artificial patterns that can be identified by people.

3. The coherence and fluency of the machine translation are also difficult to fully satisfy. This is often due to improper word order, poor style and bad mood. It is not easy to combine the translation with the identity, habit, personality of a character and specific circumstances and situations, and it does not have the ability to understand the context in a comprehensive way.

4. Machine Translation has inherent defects in cultural. Computers cannot understand the culture, including many beliefs, customs, etc. However, language is the carrier of culture, influenced by and reflect culture. Since the computer does not understand the culture, people need to input the culture items into its memory. [6] Nevertheless, the human input of the related cultural concepts can only solve the quantitative translation content within the unit time limit. Moreover, with the change of time and other conditions, the culture will change accordingly. In terms of these, computer still needs humans' help for further translation.

## 5. Conclusion

Although machine translation can help translators to reduce a lot of work, there are still some drawbacks. Translation is a tool of cultural and human communication; however, communication cannot be realized by simple machine translation, or manual translation. Therefore, machine translation and manual translation are partnerships, not competitors. [7] Machine translation allows manual translation to take on more important tasks. Meanwhile, the ultimate goal of technological development is to serve mankind. Therefore, in order to promote the development of translation, the best way is combining manual translation with machine translation.

## References

- [1] Choudhury, R. & B. McConell. 2014. Translation Technology Landscape Report [OL]. [04-28].
- [2] <https://www.taus.net/re-ports/taus-translation-technology-landscape-report>.
- [3] C.Y. Song: A Survey of Computer Aided Translation (CAT) and Its Usage, Journal of Hainan Radio & TV University, Vol. 18(2017) No. 3, p.154-158.
- [4] Z. W. Xie: Comparison of computer aided translation software Trados and Déjà Vu alignment. Journal of Drama Family, Vol. (2018) No. 6, p.209-210.
- [5] X. J. Wang, L. Zhang: The Positive Role of Computer Aided Translation Tool TRADOS in Translation. Journal of Overseas English, Vol. (2012) No.21, p. 136.
- [6] J.M. Luo, M.Li: Error Analysis of Machine Translation. Journal of Chinese Translators, Vol.33(2012) No.5, p87.
- [7] S. L. Wu: Brief Analysis of Machine Translation and Human Translation. Journal of Guangdong Communication Polytechnic, Vol. (2003) No.4, p.82-84.
- [8] Information on [http://www.sohu.com/a/214185809\\_312708](http://www.sohu.com/a/214185809_312708).