

Weaknesses of the Translation of Chinese Polysemy in English-Chinese Machine Translation and Post-Translation Editing Strategies

Lanqing Huang^{1,a,*}

¹*Department of Humanities, Nanchang University Institute of Technology, Jiujiang, Jiangxi, China, 330029*

a. huang@lanqing01.ntesmail.com

**corresponding author*

Abstract: With the rapid development of machine manufacturing and artificial intelligence, human translation seems to be endangered. In this situation, practitioners and would-be practitioners urgently need to find new ways to save the future of the translation industry. This paper analyzes the impact of English-Chinese translation in the machine age and discusses the ways in which the industry and individual practitioners can make changes. This paper draws a conclusion that according to the development of machine translation, substitution simply repeats the text and the trend of the low end of the translation work is a foregone conclusion.

Keywords: Translation, machine translation, post-edit, English study, career choice

1. Introduction

In today's society, it seems that machine translation has become a strong competitor for low-end translation jobs. Many on-service translators and parents of students who want to step into the workplace are worried about job losses---so is the author. However, machine translation is not currently a replacement for all interpreters. Many top international conferences or texts with cultural materials still seen a large number of human translators. Also, new opportunities are developing---as is the concept of "post-editing"---In which a rough draft of a translation is translated by machine, After that, the human would edit the grotesque errors in the machine translation by hand. The paper will take polysemy with rich cultural connotations in Chinese as an example to point out the current weakness of machine translation, and explain the significance of post-translation editing, so as to point out the opportunities for students who want to work in the translation industry.

As an undergraduate and the bearer of translation dreams, the study of the future of the translation industry concerns millions of people like the author. And this is the main purpose of writing this essay. The author mainly adopts the method of documentary analysis, which is within the scope of the author's ability.

This paper discusses the current impact of machine translation on human translation work, points out the possibility of combining machine translation with human translation and concludes that

"practitioners are advised to improve their translation skills, try to move to the high-end translation market, and seek job opportunities combining machine translation with the human translation".

2. Current Developments and Advantages of Machine Translation

Society is developing. As we all know, in industry and even in the humanities, machines are beginning to flourish. They eat away at people's jobs just like Boston ivy on the walls. As to the field of translation, many large international corporations or multinational corporation such as Google, Microsoft or domestic companies like NetEase, Sougou, and Tencent has developed their own translation software or function based on artificial intelligence technology [1]. According to researchers, the level of the existing machine translation between English and other languages is estimated to be at an intermediate level, which is considered better than many mediocre English major college students [2]. Since the mass market has been affected by machine translation [3], dozens of professional interpreters or parents of college students or graduate students worry that they or their children who are dreaming of becoming interpreters, will lose their jobs and go starve in the future, though there is still a sizable job market for high-end translators and interpreters [4]. The author acknowledges that translation software based on artificial intelligence, translation and computer technology does tend to become a part of human lives, and has partly replaced some simple and repetitive low-end translation tasks.

2.1. Weakness Analysis of Mistranslation of Chinese Words in Machine Translation

There are still many areas where machine translation cannot solve in practice---such as the translation of polysemous words---especially those involving human culture. In this essay, the author will take English-Chinese translation as an example to explain.

There is a joke that is often circulated among Chinese people which is written in Chinese.

Today was friend A's birthday. Friend B visited Friend A at home and gave him an expensive present. Here is their conversation. What matters most in this conversation is a polysemous word, yisi. Their conversation goes as follows.

A: 你是什么意思?

B: 没什么意思, 我就是意思意思。

A: 我怎么好意思!

B: 小意思, 小意思。

A: 那我就不好意思了!

And here are the results translated by machine.

A: What do you mean?

B: It doesn't mean anything. I just mean it.

A: How nice of me!

B: It's a small thing. It's a small thing.

A: Then I'm sorry!

We could easily find that the results done by machine are still confusing because the machine mistranslates or distorts the meaning of most yisi. When we get a manuscript that has been initially translated by a machine, we tend to get a lot of words, phrases and even sentences that make no sense. And here is where the power of post-editing comes into play. The author post-edited the translation of the machine translation. The following is the author's post-edited version.

A: What do you mean by giving me such an expensive gift?

B: Oh, please don't think too much! I just want to give you an adorable birthday present.

A: There's no need for you to give me such an expensive gift. You spent so much money on it! I think I'll have a mental burden.

B: It doesn't matter. It's a gift I can afford. Don't worry about that. And there is no need for you to return the favor. This is just my wish for your birthday.

A: Well, it's very kind of you. Then I will accept this gift.

2.2. The Difficulties of Polysemy Translation in Chinese and the Current Situation of Mistranslation in Machine Translation

It could be seen that the hidden meanings in Chinese have been unfolded after post-editing. Actually, due to the ambiguity and inclusiveness of oral Chinese, the Chinese language has a large number of polysemous words that are either conventionalized or have official standards. In the story above, the Chinese polysemy *yisi* shows its multi-level meanings in different contexts in the conversation between friend A and friend B. The dialogue is a classic application of polysemous words in Chinese. The same dialogue content is also suitable for many circumstances, such as among relatives or between colleagues or superiors, in which *yisi* can be interpreted into other connotations.

In fact, it is believed that not only in Chinese but also in any language with this feature, the machine may mistranslate or even worse, miss the hidden meaning, since their translations are relatively blunt and word-for-word translations based on existing corpora, which do not have native speakers' deep understanding and flexible use of their own national language and culture. To be brief, the machine is unable to perceive the cultural content with humanistic flavor and warmth[5], which is still an unsolved problem in machine translation at present.

The development of machine translation is not only related to the employment and life of low-level or average translators and interpreters, but also to the future of the whole industry. There is no denying that machine translation will have a great impact on the traditional translation industry, which is mainly or even entirely made up of human translation. A career is an important and even necessary means for people to support themselves and their families, which is also an important way for them to contribute to society. Therefore, it is not unreasonable for translators and parents to worry about the translation industry. However, it could be seen that many translation masters in the last century or even earlier, such as Yan Fu and Xu Yuanchong, did not have machine translation at all or the development of machine translation was just beginning in their time.

3. The Value and Translation Strategies of Human Post-Translation Editors

3.1. The Significance of Post-Translation Editing---Taking Mr. Xu Yuanchong's Manual Translation as an Example

Take Mr. Xu Yuanchong, a famous translator, as an example. The life of the famous Chinese translator totals 100 years, which is a full century. He has witnessed, so to speak, a revolution in translation. For most of his life, human translation was still the norm. Only when more than a decade before his death, did machine translation develop with the advance in technology. However, when he died, there were still countless literary and art lovers who spontaneously mourned him and lamented the death of talent. Xu has his own method of translation, which is usually grouped into three. Here the author takes Mr. Xu's translation of ancient Chinese poetry as an example. In his translation, there is a famous method called "three changes", which was also the core of the ideas he developed during his career as a translator[6]. In Chinese culture, the number "3" is often used to refer to "many kinds". Mr. Xu devoted himself to transforming the complex and delicate rhetoric in Chinese, especially ancient Chinese, into easy to understand by various means without losing the original style and rhetoric. Also, he pursues "three kinds of beauty" of translation. The sound, style

and connotation of the translation should be beautiful and conform to the original poem, among which the former two serve the beauty of connotation. Here the author will present the original and translation of an ancient Chinese poem translated by Mr. Xu to introduce the charm of his translation.

This is the original text of an ancient poem, which was written by the ancient Chinese poet Meng Haoran when he lived in seclusion in the mountains.

《春晓》

春眠不觉晓，
处处闻啼鸟。
夜来风雨声，
花落知多少。

The following is the translated version by Mr. Xu Yuanchong.

Spring Morning

This morn of spring in bed I'm lying,
Not to awake till birds are crying.
After one night of winds and showers,
How many are the fallen flowers!

The translation involves the context in which the poem was written. It was spring when the poet wrote his poem, when he had just woken up from his sleep. Spring is not a completely peaceful season in China. Sometimes when the flowers sprout and bloom, there would be wind and rain to knock them down. The poet woke up in the morning, saw a field of petals, loved this natural sight, sighed at the sad image of flowers withering. So he wrote a poem describing what he saw---just like what William Wordsworth, Samuel Taylor Coleridge or Robert Southey would do on British soil.

Mr. Xu consciously retained the rhyme technique in this ancient poem. He consciously retained the rhyme technique in this ancient poem and also kept the strict rhythm of the original poem---on the basis of not violating the rules of grammar, the length of the verse is kept as close as possible.

Mr. Xu was deeply influenced by ancient Chinese thoughts such as Confucianism and Taoism. These ancient thinkers attach importance to the relationship between man and nature and explain the way of dealing with people in accordance with natural laws in a gentle way. These methods have been applied to all aspects of life by the Chinese nation, as Mr. Xu has incorporated these ideas into his translation work. Mr. Xu makes full use of various translation skills, such as the idea of domestication and the transformation of parts of speech, and combines them with the excellent ideas of ancient China to flexibly translate a meaningful poem translation[7]. The author believes that the existing corpus-based machine translation, and even the recently developed neural network translation, are difficult to accurately translate human cultural treasures with hundreds, thousands or even longer history. Human beings have initiative, passion and dreams, and they have used the human brain, a delicate work of nature, to create countless excellent translations that will be inscribed in history. These are qualities that cold, emotionless machines cannot achieve.

3.2. Translation Learning or Future Translation Strategies and Matters Needing Attention for Practitioners

Even so, the author believes that practitioners and those who want to enter the industry should face the crisis of low-end translation work. It should be seen that machine translation is already capable of, or will soon be capable of, a significant proportion of daily translation work, while high-end translation is only a small part of the total translation industry. In other words, to continue to have a stable full-time human translation job, you have to be at the top of the pyramid. Looking at the masters in translation, all of them have honed their skills to the limit so that they can still be

considered standard and respected in the fierce competition between machine translation and armies of human translators.

4. Summary and Outlook

Translators should turn to human translation and machine translation plus post-editing in a timely manner. In the current situation, machine translation can not be ignored, post-editing is the area where human translators can have a large space to play. As is known to us, the use of machines is often seen as a way to save on relatively high labor costs -- people need to support their families and have their own spiritual needs, which increases their expenses and costs employers more money to some extent. The growth of machine translation has compressed the income opportunities for purely human translators. At the same time, however, there is room for the earning potential of post-editors to grow---purely human translators in mainstream languages such as English can seek post-editing jobs instead; However, machine translation of small languages is a minority, and its human-machine combined translation market is blank and has the great market potential[8]. Interpreters should recognize the power of people. As the Internet and the development of science and technology, produce new words in human language, the words such as news and current affairs, culture and the network language and other aspects, these new words carry new trends of language development and the direction of human, and these new words are accurate and professional translation may not exist in the existing machine translation corpora[9]. These are the areas where machine translation is not yet available. Therefore, post-editors may also choose to look for translation opportunities in these fields. In any case, it is almost certain that low-end translation work and translation of the simple, straightforward text will be dominated by machine translation. Even with the emergence of a blue ocean in the post-editing market and cultural translation still being the field of advantage for human translators, it is still a lifelong concern for human translators to constantly improve their own professional level and pursue their own translation level. At a time when machines are eroding human jobs, standing at the top of the pyramid may be the best place to survive.

5. Conclusion

This paper draws the conclusion that according to the development of machine translation, substitution simply repeats the text and the trend of the low end of the translation work is a foregone conclusion, therefore, can be thought of as a part-time interpreter and many parents of students worry that makes sense. Regular full-time artificial inauguration of the translator to a certain extent can become difficult, and income potential may decline rapidly. At the same time, the cutting-edge translation market consisting of a small number of high-level translators is relatively stable, and the post-editing market has become a blue ocean. In a market, ordinary people still make up the majority. And in a market where ordinary workers are still the majority, they still have to face directly the impact of machines on jobs. For general translators and prospective practitioners with strong translation employment intentions, lifelong learning and exploring the development direction of the industry can be done. Complete human translation is almost a thing of the past, and the market for post-editors will gradually expand. For ordinary practitioners in the translation industry, the author believes that they can shift their employment direction to the translation of texts in the cultural field and the translation of the latest words in the development of human language, and continue to learn in their career to maintain their sustainable competitiveness. Adaptability is an important human survival skill, and the future survival of the translation industry requires translators to change themselves. Future research could also focus on post editors' job development and vocational skills upgrading, so as to provide help for practitioners and dream catchers.

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