Translation Methods in Informative Text of an Assessment Report on Joint Commissioning and Test of the HN Urban Rail Transit Equipment System (excerpt)

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Abstract: This paper is based on the source text of An Assessment Report on Joint Commissioning and Test of the HN Urban Rail Transit Equipment System (excerpt) (hereinafter referred to as Rail Transit Report), which is a C-E translation project the translator participated in. Reiss' text typology theory serves as guideline in this paper. By understanding of text type translation theory and taking examples from lexical and syntactic aspects, some translation methods and experiences are summarized to achieve the main purpose of information transmission.

Keywords: Engineering Text, Informative Text, Translation Theory

1. Introduction

Urban rail transit serves as an important part of the rail system, because it greatly alleviates people's travel pressure in most cities. At present, China has become a fast-growing country in the rail transit industry in the world. By the end of 2020, China's urban rail transit has a total mileage of 7,545km, with transport services covering of a total of 233 lines in 44 cities across the country (excluding Hong Kong, Macao and Taiwan), known from the State Council. As far as quantity and quality, China's urban rail transit technology stands at the forefront of the world. This provides conditions for Sino-foreign cooperation.

With China's rail transit industry rapidly improving and Sino-foreign collaboration rising, a slew of "Belt and Road" projects, including rail transit, have recently arisen. Since the translation of engineering texts is of incredible significance for the execution of the project, accurate translation of such text is in an urgent state.

The project of HN urban rail transit adopts Chinese construction equipment, standards, and loans. The entire line of the project is around 13 kilometers long and comprises 12 stations, and it will significantly reduce the traffic congestion in the urban area of HN.

The translator expects that this translation report can do something for railway transportation translation, and furthermore gives reference to such translation practices.

2. Text Features of Informative Text

Reiss's text typology theory, which is based on functional translation theory, provides an evident and reasonable theoretical foundation for this study.

2.1. Introduction to Informative Text

In reference to Reiss's text typology theory, Munday classifies Reiss's translation methods goes on to help translators to measure translation quality standards[1]. See Table 1 for details.

As we can see from Table 1 above, Reiss separates the text into three categories and each text type has a different association with its translation strategies. "The informative text is like stating source text

facts. This kind of text is content-oriented, and it aims to convey information to the readers."[2]. In conformity with Reiss, the informative text acts as a means of conveying ideas, learning as well as facts, so the words should be as concise as possible to achieve the intention of "barrier-free" reading for readers when translating such texts.

Table 1: Functional characteristics of text types and their links to translation strategies

Text Typology	Informative	Expressive	Operative
Language Function	Representing objects and facts	Expressing a sender's attitude	Making appeal to text receiver
Language Dimension	Logical	Aesthetic	Dialogic
Text Focus	Content-focused	Form-focused	Appeal-focused
Text Typology Should…	Transmit referential content	Transmit aesthetic form	Elicit desired response
Translation Method	Plain prose	Identifying	Adaptive

The informative text is different from expressive text and operative text[3]. The words for expressive texts are "emotion" and "attitude". Compared with informative text, this kind of text is clearly formal-oriented when translating. The operative text is to appeal to the recipient of the text, and the point is to infect the reader. For example, advertising and election speech are designed to attract the audience or readers.

Therefore, from the perspective of text typology, this rail transit project is an information-based text. The translation should pay attention to the following translation principles: plain, objective, logical, consistent, accurate and clear, and keep in mind to avoid expressing personal emotions.

2.2. Text Features of Rail Transit Report

The source text introduces the joint commissioning and test of relevant system of train, communication, power supply unit, which makes it an information-focused text.

Writing features of the source text tends to be discussed as follows. First, there are plenty of technical terminologies in the source text, especially the professional vocabulary of urban rail transit at lexical level. Second, at syntactic level, the source text contains numerous long and complex sentences. And the assessment report contains the details of the results of the trial operation of the rail transit and the problems arising from the test. Therefore, the text features, such as plain language, no subjective will, etc., are conforms to the objectivity-focused informative text[4].

3. A Brief Introduction to Reiss' Text Typology Theory

Reiss's text typology theory, which is based on functional translation theory, provides an evident and reasonable theoretical foundation for this study. Katharina Reiss is a spearheading translation scholar of the German Skopos theory[5]. Her works have established the framework for the improvement of early functional translation theory.

Text Typology Theory, which was advanced by Katharina Reiss in her book Translation Criticism: The Potentials & Limitations in 1971. It introduced the text typology into translation criticism and connected text types with translation methods for the first time. Reiss separates texts into three types: informative text, expressive text and operative text, and proposes a series of translation strategies and critical standards. And she also emphasizes that the type of the text dominates the translation method[2].

Reiss emphasizes that the type of the text dominates the translation method. In other words, learning to correctly distinguish text types is a shortcut to completing high-quality translations. Of course, it is necessary to learn to apply relevant strategies in the translation. The relationship between text types, language functions, and language dimensions is also brought forth for the first time in her book Translation Criticism: Potential & Limitations. Reiss would love to construct a comprehensive and objective model of translation criticism as well as a comprehensive and objective model of translation evaluation.

4. Case Study of Rail Transit Report under the Guidance of Text Typology Theory

This chapter mainly analyzes the typical cases in the process of translation. Reiss points out that the

main content of informative text is to express facts and information, transfer knowledge and viewpoints, and this kind of text should mainly focus on content rather than form. The translator will analyze the translation with some typical translation cases from the lexical and syntactic perspective based on Reiss's text typology theory.

4.1. Case Study at Lexical Level

In this section, there will be two translation methods discussed here: free translation method in terminology translation and omission method in non-technical words translation.

4.1.1. Free Translation Method in Terminology Translation

Terminology is a set of appellations used to represent concepts in specific disciplines (From Cambridge Dictionary). Wei Mengfen summarizes the lexical features of terms, and divides the translation method into six categories: literal translation, free translation, transliteration, graphological translation, combination method of transliteration and free translation and non-translation[6].

The assessment report cannot be translated word by word, but the original information should be presented in plain language; translators must infer its extended meaning according to the paragraph context[7]. Examples related to free translation will be recorded here to achieve fluency.

TT: There is no foreign matter in the air duct, and the model verification conditions of tunnel ventilation system are met.

Analysis: In the above translation example, the word "air duct" refers to "feng guan" in the source text, it can't be translated as "wind pipe". When confronting the terms like this, the first thing the translator should do is to browse the parallel texts and related books to find out the exact meaning of the term rather than translate it according to its literal meaning. After reading related materials, the translator found that the Chinese word "feng guan" in the source text refers to a system used for air transportation and distribution. The word "feng" refers to "air" rather than "wind". In this sentence, "guan" refers to something that can ventilated, so it is translated as "duct", and "pipe" means the drainage pipe, so "pipe" cannot be used here.

The above cases reflect that the translation method of free translation is very useful. However, if the above terms are still translated literally, the meaning of the paragraph is difficult to be understood, and it also deviates from Reiss' idea of "accuracy" and "clarity" in the translation version. As above, free translation can play the role of conveying information accurately.

4.1.2. Omission Method in Non-technical Words Translation

Chinese and English expressions are different in which some meaningless words such as mood words and related words in Chinese do not need to be translated to achieve a more rigorous logic of translation[8].

TT: The test of ATS central level function and signal system degraded mode function was carried out, to verify that the main functions of central level and station level of the signal ATS subsystem.

Analysis: Omission method is adopted in the above example. There is a phrase "tong guo" appears at the beginning of the sentence in the source text and it shouldn't be translated in the translation version. The meaning of the source text does not change, but the translation is more readable, fluent and concise. Since the intention of some Chinese characteristic words is mainly to balance sentence structure or composition, but does not have exact impact on the actual meaning. After omission, the sentences in the translation version are more fluent and concise.

Reiss emphasizes informative text should match the requirements of source text information transmission, and the translation of some non-technical words also requires in-depth thinking and flexible translation to achieve this requirement. With the intention of conveying the content of the assessment report and ensuring the smooth completion of the urban rail transit project, omission translation method applied here is helpful to the target readers[9].

4.2. Case Study at Syntactic Level

There is a huge difference in the expression of syntactic structure between Chinese and English, so it needs to be converted during translation. The following comparison table 2 of English and Chinese syntactic structures can be seen more clearly[10].

Table 2: Syntactic structure comparison between Chinese and English

Chinese Structure	Chinese Structure
semantic language	grammatical language
stresses onparataxis	stresses on hypotaxis
structure like a bamboo	structured like a tree
centred on verbs	structured like a tree
dynamic description	structured like a tree

When a sentence contains a range of transitional words or additional components, the sentence will be more complex in semantics and structure due to the excessive amount of information[11]. Long sentences translation will be analyzed here. The method of passive sentence translation and null-subject sentence translation can make the text more target language-oriented on the basis of keeping precision of the information and content.

4.2.1. Division Method in Long Sentence Translation

"In general, some long and complex sentences cannot be clearly expressed in one sentence in the translation version, and the division method can be used. However, the translation method of division cannot be used solely by length of the sentence."[12]. In some long Chinese sentences, the subject of each clause is inconsistent or each clause expresses different meanings. At this time, the original sentence can be split and restructured in logical order in the translation version[13].

TT: From October 2, 2020, the accuracy of interface function of FAS with power supply, AFC, escalator, HVAC was inspected for the Qindu Station. There was mainly failure of FAS individual system to complete commissioning, error or failure of interface wiring of some cables. The test was only for the verification for the connectivity of cables and the correctness of equipment interface. 20 problems were found, and have been rectified, as shown in Annex 4.

Analysis: There are four sentences in the above target translation version, but it is only one long sentence in the source text. The translator divided this long sentence into four short ones. The first is "What to do in 2020". The second one is "What problems exist in the Qindu Station". The third one is "What's the problem after testing". The last one is "Identify the problems and rectify them". After analysis, the translator finds that the source text is in chronological order and each short one emphasizes its own aspect, so the translator translates the source text into four short sentences. After translation, the target text is more readable for target readers, which achieves content delivery and matches the features of informative text.

The above example illustrates the application of the translation method of division can accurately transmit the facts of the assessment report, and also makes the sentence concise and easy to understand.

4.2.2. Passive Voice Translation in Long Sentence Translation

Chinese is different from English, because Chinese focuses on semantic functions and has a flexible and concise structure, while English is a rigorous grammatical language with a complete and clear structure. Chinese prefers active voice, but English uses passive voice more frequently. The following example illustrates this point briefly[14].

TT: On November 2, 2020, the test of traction power supply capability was completed.

Analysis: In the above sentence, "the test of traction power supply capability was completed" is translated as passive voice, but it is an active voice in Chinese version. As stated by Reiss (2004), the transmission of the content in informative texts should be invariant. Therefore, the expression of passive voice is important for target readers to understand the meaning of source text accurately.

Qualified translation of the content-focused texts should be reader-focused. Therefore, the active voice of the source text sometimes can be conversed to passive voice in English when translating to achieve the goal of reading naturally.

4.2.3. Null-Subject Sentence Translation

From the linguistic perspective, The English language places a greater emphasis on sentence structure, whereas the Chinese language places a higher attention on sentence meaning. This difference is also reflected in the texts. In a Chinese sentence, the lack of a subject has little effect on the reader's understanding of the sentence, but English pays more attention to logic, so if an English sentence lacks a subject, the sentence will be incomplete[15,16].

There are lots of null-subject sentences in this project. Some sentences without a subject in source

text are clearly expressed and have complete meanings. Here are examples.

TT: Before joint commissioning and test, we confirm the preconditions of system joint commissioning and test.

Analysis: There is no subject in the sentences in the above source text. For English sentences, the sentence structure is incomplete. After reading the context, the translator understands the "Our Party" reacts as the action sender and subject in the above sentence. Therefore, the translator added "we" as the subject and completes the sentence structure so that the translation can accurately reproduce the original information.

TT: Verify whether the interface function and performance of each equipment system meet the design requirements and the operation requirements.

TT: Promote all equipment systems along Line 2B to pass trial operation review smoothly.

Analysis: There is no subject in the above two examples, and they belong to null-subject sentence. When translating, the translator puts the verb "Verify" and "Promote" in the above examples directly at the beginning of the sentences to make the sentence concise and emphasize the key points. It is not difficult to find that the use of passive voice method in this sentence will be more verbose. Because if passive voice was adopted in this sentence, emphasized content is the subject, then the target readers will spend more time to get the key information. In fact, the source text does not emphasize the subject, but highlights the specific operation of the action. Therefore, it is more appropriate to translate the two sentences into imperative sentence.

During the process of C-E, the subject needs to be supplemented to ensure that the structure of English sentences is complete and the target readers understand the source text meaning exactly. While other sentences without a subject in the source test should be translated into imperative sentences, which is convenient for readers of the target language to read.

5. Conclusions

In summary, the translator believes that high quality translations are obtained through the choice of appropriate methods and strategies. In this assessment report, the translator adopts translation method of free translation and omission at lexical level and division and conversion at syntactical level. So as to further improve the accuracy of engineering text translation, and ultimately promote the further development of international translation cooperation projects.

Acknowledgements

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