Study on Translation of ST English Texts from the Perspective of Text Typology

Xinfeng Sun

School of Foreign Languages, China University of Petroleum (East China), Qingdao.

Sunxf369@126.com

Abstract. From the perspective of Text Typology, this paper analyzes and summarizes the language characteristics of English for Science and Technology and combines some translation examples to discuss the translation skills and methods suitable for the style of English for science and technology, in order to provide some reference for the translation of English for science and technology, so as to effectively improve the quality of the translation.

Keywords: Text Typology, ST English translation, Informative Text.

1. Introduction

The global diffusion of technology in science and technology industry and related industries is a remarkable feature of economic globalization. As an international language, English is frequently used in international science and technology communication. The translation of scientific and technological English into clear, understandable, and accurate Chinese is of great importance to the study of foreign advanced science and technology. Based on the text type theory, this paper tries to give examples and analyze some Chinese translation skills of English for Science and Technology from the two aspects of scientific vocabulary and syntax, so as to improve the quality of scientific text translation and ensure its scientific, professionalism and standardization.

2. Stylistic Features of English for Science and Technology

2.1 Vocabulary

English for Science and Technology words are accurate, concise, and clearly expressed. Focus on objective facts and truthful description, will not be mixed with personal subjective feelings and judgments. There are a lot of technical terms in English for Science and Technology texts. Some of these words are purely technical and some are semi-professional. The meaning of pure scientific and technological words has the characteristics of singleness and strong professionalism, which is usually manifested as one meaning, that is, a term can only correspond to one target language translation, and cannot be used in multiple fields, but only applies to a certain discipline or professional field.

2.2 Syntax

In English texts of Science and Technology, nominalization structure is widely used in order to effectively reduce the use frequency of subject-predicate sentence pattern, so as to improve the objectivity, conciseness, and accuracy of the article. In addition, there is a large use of the passive voice in scientific and technological style.

3. Text Typology and Translation

In 1934, Karl Buhler classified the semantic functions of language into three categories according to the constitutive factors in the tool model of language and the relations between these factors: information functions, information functions. expressive functions and appellative functions. According to Buhler's classification of language functions, the text type theory was first proposed

by German translation theorist Katerina Rice in 1971. Rice divides text into three main types: informative, expressive, and operative. She elaborated on the prominent features of various text types and proposed some translation methods with reference to different text types.

Information text is mainly content based text, information is the first, and its biggest language function is to convey the objective facts truthfully. The language of this type of text is characterized by strong logic. When translating such texts, it is important to convey the original content objectively and accurately.

According to the classification of text types, English for Science and Technology is a typical information-oriented text. The translation should objectively convey the information content of the original text and strive to be accurate. Under this premise, the translator had better choose to present the translation in a way familiar to the target language readers, so as to ensure the effective transmission and communication of the original content.

4. Case Analysis

4.1 Vocabulary

Vocabulary is the basic unit of discourse composition, and vocabulary translation is particularly important. There are some obscure pure scientific and technological words in English for Science and Technology texts, which are rarely used in daily life and the frequency of use is very low. For such professional terms, literal translation method is generally adopted to improve the accuracy by referring to parallel texts or checking in professional websites or dictionaries. In addition, there are a large number of specialized common words in English for Science and Technology texts, which are highly professional and polysemy. For this kind of words, when translating from English to Chinese, we should combine the context more, so as to accurately select the correct word meaning.

Example 1

It was not until that the discovery of rejection in the 1940s, scientists found out the reasons for the failure of human organ transformation.

Translation

直到 20 世纪 40 年代，发现了排异反应后，科学家才搞清楚了人体器官移植失败的原因。

Analysis

In this example, we often use the word "rejection" in our daily life. It means "to reject". "rejection" is a very important part of the medical field. It is a very important part of the medical field. It is a very important part of the medical field.

Vocabulary is the basis and premise of sentence translation. Terminology plays an important role in conveying information in information-oriented scientific texts, and the importance of terminology translation is self-evident. When translating, it is necessary to combine professional knowledge and consider the applicable occasions of words, so as to accurately select the correct meaning of words and avoid mismatching the topic and failing to achieve the meaning.

4.2 Objective Statements

The most important feature of scientific and technological style is the simple objective statement of facts or concepts, and the static nominalized structure can improve the objectivity. So the sentence should be transformed into a highly dynamic verb structure in Chinese according to the logical relationship of the sentence, so that it cannot only truthfully express the original meaning, but also make the translation natural and smooth.

Example 2

The cementation strength of shale would be destroyed by the entrance of mud reclaimed for water-sensitive shale formation with beddings, pores and microfractures and weak cementation strength like sandstone, carbonate rock.

Translation

对于层理、孔隙和微裂缝较发育、地层胶结差的水敏性页岩（砂岩、碳酸盐岩等）地层，滤液进入后会破坏页岩的胶结强度。

Analysis

In this example sentence, the entrance of the noun structure can increase the objectivity and conciseness of the language expression and can more closely link the sentence information together. In Chinese, there are more abundant verbs. entrance and mud belong to the subordinate relationship in the surface structure, but after understanding and analyzing, they belong to the subject-verb relationship in the deep structure. The verb form corresponding to entrance is entered, which is restored to the Chinese subject-verb structure "filtrate to enter" when translated into Chinese.

English and Chinese are two different language systems. In English for Science and Technology articles, the frequency of verbs is less than that of nouns, and nominalization structure is a very common phenomenon. Therefore, when encountering the nominalized structure in the scientific text, in order to make the translation more in line with the habits of the target language readers, it is usually necessary to restore the logical relationship in the original text when translating into Chinese.

4.3 The Passive Voice

The passive voice is commonly used in scientific English, and subjective speculation should not be avoided. Therefore, the reader can focus more on the object. In the process of translation, the passive sentence pattern can be changed into the active sentence pattern, so as to conform to the Chinese language standard, faithfully reproduce the original meaning, and achieve the organic combination of form and content.

Example 3

A huge push is needed to get all the rocket stages off the ground.

Translation

火箭各级全部离开地面，需要有巨大的推动力。

Analysis

It is needed to be in the passive voice. Equivalently, this translates as "a big push is needed," but that translation reads stiffly. According to Rice's text type theory, the translation of scientific and technological information texts should not only emphasize the accurate transmission of the original content, but also consider the acceptance degree of readers. Therefore, it is more in line with Chinese expression habits to translate it into an active sentence pattern "requiring a huge driving force".

Passive sentences are often used in English for science and Technology due to the requirement of objectivity. Therefore, the Chinese translation should not be restricted to the surface structure of the source sentence, but focus on the transformation of its deep structure, and finally present it in the language form most familiar to the target language readers.

5. Conclusion

English for Science and Technology is an informational text, and its translation follows the principles of faithfulness, accuracy, and smoothness. When translating professional terms, translators should accurately select the meaning of the word according to the context. For some nominalized constructions in English, they can be transformed into Chinese verb constructions. Under the guidance of text type theory, translators should flexibly use translation skills to effectively transmit the information of the original text to the readers.

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