

A Study on the Translation of Instrument User Manuals From the Perspective of Skopos Theory

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The user manual is very important for products. Users must refer to the user manual if they want complete access to and expert use of a product. Excellent products from different nations have the chance to circulate around the world in the framework of economic globalization. Due to language barriers, the translation of user manuals is becoming increasingly important. This paper covers the translation of instrument user manuals under the guidance of Skopos Theory, which is credited to functionalist translation theory. It begins by analyzing the user manual's textual features. Then it proposes specific translation strategies at the vocabulary and sentence levels to overcome the difficulties in translation. It is hoped that this paper will provide a reference for translators in the same field, and improve the professionalism and readability of instrument user manual translation.

Keywords: user manual translation, Skopos Theory, term determination, passive voice

Introduction

The translation of user manuals has not received enough attention in the current study. The majority of manual translations use post-translation revision together with machine translation. This is prone to technical terminology errors and awkward wording, which could cause people to operate it incorrectly. Currently, reports on translation practice comprise the majority of user manual translation studies. Few scholars have systematically elaborated on user manual translation from the perspective of professional translation theories. Taking “user manual translation” as the keyword, the author found about 60 papers on CNKI, of which more than 10 are highly relevant.

Li (2009) mainly studied the Chinese-English translation strategies of user manuals. The author observed that mistranslations abound in the translation of user manuals today. So, the author proposed coping strategies and translation skills for user manuals. Cui (2008) discussed the principles and precautions of the English translation of user manuals from the perspective of compilation. Zou (2015) looked at the translation of user manuals from the translation principle of “faithfulness, expressiveness and elegance”, and pointed out that manual translation should provide accurate and true information, use word specifications in line with the reading habits of Chinese readers, and pay attention to user needs. Mei (2017) guided by the theory of translation aesthetics specifically discussed the translation skills of automobile technical texts and the coping strategies for translation difficulties based on the case study of automobile user manuals.

This paper mainly discusses the translation of instrument user manuals from the perspective of Skopos Theory. It analyzes the characteristics of the text and proposes corresponding translation strategies. The language involved in instrument user manuals is relatively complex, which is a big challenge for translators with a background in the liberal arts. According to the search results, there are few references with high correlation, so it is necessary to conduct in-depth research on this issue.

The 1970s saw the emergence of German functionalist translation theory. The old “text-centric” translation theoretical framework was broken by this school’s emphasis on function or textual function in translation studies, paving the way for new directions in the field. This idea has significant guiding value for the translation of user manuals, regardless of the function or text function. In this essay, Katharina Reiss’s text typology and Hans J. Vermeer’s Skopos Theory are mostly discussed (Liu, 2017, p. 1).

Based on language function theory, Reiss divided texts into three types, namely “informational texts”, “expressive texts”, and “operational texts”. The user manual is a typical information-type text, which focuses on conveying information through the use of professional, concise, and accurate words. Skopos Theory proposed by Vermeer plays an important role in functionalist translation theory. The word “Skopos” has three meanings, namely, the translator’s purpose, the communicative purpose of the translation, and the purpose to be achieved by using a special translation method (Hu, 2008). The main function of the user manual is to provide users with information and guide operations. However, we also need to pay close attention to user experience and make every effort to establish a context for communication during the translation process.

Text Analysis

Complex Background Knowledge

Instrument user manuals require a great deal of complex scientific expertise. Before translating, translators should have a thorough understanding of the instrument. They should be well-versed in the instrument’s operation as well as the clear details of the accessories for each component. Our translation examples are selected from chemical instrument user manuals, which contain a lot of chemicals and chemical reaction formulas. As a result, translators are required to search for a large amount of information and conduct in-depth studies on them.

In addition, it is hard to find detailed information about instruments on the Internet. Therefore, the translator needs to collect all kinds of information about the instrument through different websites, and arrange it in an organized way to actually learn about the product. For some background knowledge that is really difficult to understand, the translator needs to actively consult professionals to ensure the accuracy and professionalism of the translation.

Extensive Use of Proper Nouns

Compared with other texts, the user manual tends to be more concise with fewer long and difficult sentences, mainly conveying information. However, as a guiding manual, there will be a lot of nouns piled up in the user manual (He, 2013). In particular, the introduction part of accessories in the manual contains almost all proper nouns, which need to be validated by the translator one by one. We will take the manual injector as an example. The manual injector is a chemical instrument, which is mainly used in chromatographic analysis experiments. The sample is filled into the sample loop through the injection valve and then connected to the chromatographic column to analyze the sample components. The manual injector delivery checklist contains a series of proper

nouns, such as hex key, mounting pole, connection capillary, organizer plate, catch tube cap, sample loop, etc. These are uncommon English terms. The translator needs to find the meaning in a dictionary, and then verify them on the website. Therefore, the extensive use of proper nouns is quite a challenge for translators.

Widely Use of Passive Sentences and Imperative Sentences

The installation instructions are crucial in helping users learn the precise procedures for using the instrument. In contrast to the graphic section, which mostly uses imperative sentences, this explanation section expresses an objective stance with a focus on information expression. The imperative sentence usually omits the subject, which will directly and clearly instruct the user on how to operate the instrument. However, in the process of translation, all the different situations need to be considered, whether to perform equivalent translation according to the sentence pattern of the original text or to adapt to a certain extent to achieve better results.

Translation Strategies

Translation strategies of instrument user manuals are mainly discussed at the vocabulary and sentence levels. Regarding vocabulary, we must pay close attention to the search and determination of terms, and the translation of industry-specific vocabulary. In terms of sentences, passive sentences are common in scientific and technical texts and explanatory texts. They make clear references to things, making it difficult for confusion to result. The sentence will seem blunt if it is directly translated into Chinese passive sentences since they do not follow Chinese expression conventions. Certain adjustments should be made during the translation process (Chen, 2018, p. 101). Imperative sentences are also quite common in manuals. The translation into Chinese generally adopts the method of adding a subject, which is more in line with the expression habits of Chinese. But it still depends on the context of the sentence.

Word Level: Terminology Determination

Each instrument involves a lot of technical terms. For some niche instruments, the related information is quite limited on the Internet, which increases the difficulties in determining the meaning of terminology. So all the terms should be searched in multiple ways. We can first use a variety of dictionaries to compare definitions, then make use of translation aids, and finally verify the meaning of the determined terms through web searches.

Example 1: The Agilent 1200 Series manual injector uses a Rheodyne 7725i 6-port sample injection valve.

Translation: 安捷伦1200系列手动进样器采用Rheodyne7725i六通阀。

To determine the meaning of the term “6-port sample injection valve”, we first enter the entire term into the Bing dictionary, but the relevant meaning cannot be found. But if we search “injection valve” alone, the meaning of “进样阀” will be found. Baidu Translate translated the term as “六端口进样阀”, while CNKI translation assistant translated it as “六口进样阀”. In this situation, we need to turn to webpage searches for verification. During the search process, the concept of “六通进样阀” constantly shows up, which seems pretty appropriate here. In addition, Baidu Encyclopedia regards “六通进样阀” as a synonymous phrase for “六通阀进样器”. The injection valve is the most important part of the injector. The sample can enter the chromatographic column through the injection valve to complete the sample analysis. According to the context of the original text, the author thinks that it is more appropriate to translate it as “六通阀” here, and it also conforms to the succinct characteristics of the text.

From the perspective of Skopos Theory, the ultimate purpose of the user manual is to let users learn about the product and be familiar with the operation. What the translator has to do in the translation process is to

accurately convey the information to the target readers. Therefore, the translator does not place too much emphasis on the correspondence between the original text and the translated words. The focus is mainly on helping users understand the composition of the instrument.

Word Level: Industry-Specific Vocabulary Translation

In addition to technical terms, instrument user manuals also include a large number of industry-specific words, which generally appear in the operating instructions. Such words have special meanings in the context of instrument operation, and corresponding definitions cannot be found in dictionaries. Therefore, in the translation process, the translator should understand the specific meaning of the words in the specific context, and then verify it through web searches. Industry-specific vocabulary is often disguised as a simple word but actually has a complex meaning. If the translator does not pay enough attention, it is easy to mistranslate.

Example 2: A make-before-break passage in the stator ensures flow is not interrupted when the valve is switched between the INJECT and LOAD positions.

Translation: 当阀在INJECT（进样）档和LOAD（充样）档之间切换时，定子上的先合后开通路可以确保流量不发生中断。

In translating the words INJECT and LOAD, we will find that seemingly they are two simple words. But these two words mean differently in the installation instructions of the manual. It can be concluded here that they belong to special words in the industry. The diagram of the installation part is relatively difficult to understand, so the translator directly entered keywords to search on the web pages and found a more detailed installation diagram with explanations. On the whole, the two words here can be understood as meaning sample injection, but there is a certain distinction on this basis. LOAD means that the sample is loaded into the sample loop, and then the quantitative sample is sent to the chromatographic column through the INJECT gear. That is to say, the real sample injection position should be the INJECT gear. Therefore, the author believes that it is appropriate to translate it as “进样” and “充样” respectively.

Sentence Level: Passive Sentences

There are a lot of passive sentences in the user manual because they are able to express the meaning in a clear way. However, the use of passive sentences in Chinese is relatively rare. If there are a large number of passive sentences in the text, it will make readers feel unnatural. Therefore, the translator should think about carefully how to make the meaning clear and avoid using passive sentences in the translation of instrument user manuals.

Example 3: Sample is loaded into the external 20- μ l sample loop through the injection port at the front of the valve.

Translation: 样品通过进样阀前端的进样口充入置于外部的20微升进样环。

The original sentence takes the passive voice and omits the subject. If the translation takes the same sentence pattern, it will cause incoherence between the subject and the predicate. Therefore, the translation taking the active voice is more in line with the meaning of the original sentence. Besides, it can also achieve concise sentence structure and clear expression as the original sentence. At the same time, the translator adjusted the word order of the sentence to make the overall reading more coherent.

Sentence Level: Imperative Sentences

Imperative sentences are also frequently used in instrument user manuals, especially in the operating and installation parts. Generally speaking, the operation of the instrument is complicated, and it is usually

accompanied by diagrams. The text in the diagrams mainly includes imperative sentences. The translation of the diagram part requires certain computer skills. It needs to use drawing software to cut out the original text and then fill in the appropriate translation. Different translation methods should be adopted to translate imperative sentences based on the situation. Similarly, according to the principle of Skopos Theory, the translator usually adopts the strategy of amplification to create a context for dialogue from the user's point of view.

Example 4: Check the manual injector fittings periodically for signs of leakage.

Translation: 请您定期检查手动进样器各接头位置, 查看是否有泄漏情况。

The imperative sentence will omit the subject and directly give instructions, so readers can quickly get information and perform corresponding operations. However, users' acceptance and reading habits should be considered when translating imperative sentences. In addition to basic information expression, the Chinese pay more attention to the overall expression effect. On the basis of simplicity, the tone must also conform to the current context. Therefore, the translator here adopts the strategy of amplification, actively adding a subject to the sentence.

As a practical text, the user manual focuses on conveying information to readers, which is also the most basic function of the user manual. Thus, in the process of translating the user manual from Chinese to English, the most basic principle is to ensure the accuracy of the information. And the translation must reflect professionalism in both vocabulary and sentences. At the same time, the translator should also pay attention to readability (Guo, 2019, p. 168). In terms of readability, the translator needs to create a context for communicating with users and realize the functional purpose of the user manual.

Conclusions

Users learn about all aspects of the product through the user manual. Compared with general products, the language involved in instrument user manuals tends to be more professional and complex. It requires translators to make sufficient pre-translation preparations, search for a large amount of background information, and even learn professional knowledge in unfamiliar fields. Difficulties that may be encountered in the translation are mainly reflected in the search and determination of terms in terms of vocabulary. Instrument-related terms often contain a large number of difficult words, and a large part of them cannot directly find the corresponding meaning in the dictionary. In response to this situation, translators should be good at conducting network searches and network verification.

In addition, the translation of industry-specific vocabulary also brings a lot of challenges to translators. Industry-specific vocabulary often wears the cloak of ordinary words but has complex connotations. Translators should pay attention to distinguish them during the translation process, especially when the meaning of the sentence is complete but not smooth. This paper mainly discusses the translation of instrument user manuals from the perspective of Skopos Theory, hoping it may provide a reference for translators in related fields in the future.

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