Features of Mechanical Product Instruction and Its Translation Strategies

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Abstract. Mechanical product instruction is a kind of application writing used to introduce the performance, specifications, use and way of maintenance about specific mechanical products. With adaption theory as its guiding theory, this paper offers a contribution to the area of the translation of mechanical product instructions. The translation of mechanical product instruction serves the very purpose to provide some information about products known to the public, and to draw consumer’s attention and inspire their purchasing desire. Guided by this purpose, the translators should conform to some criteria and employ proper strategies to produce a relatively perfect translated text.

1. Introduction
Nowadays, more and more mechanical products made in China are sold to foreign markets and they are getting recognition from many more foreign consumers. As is required, each product should contain a detailed instruction introducing its quality, function and usage so that it can serve consumers to better understand how to use this product and how to prevent from damaging. In addition, the instruction with good translation can also bring about a positive image of the manufacturers. Obviously, the product instruction has played an important role in the international market. However, in the actual process of translation, some mechanical product instructions are not concise or clear enough, which sometimes even cause some misunderstandings. Therefore, the correct translation of the mechanical product instruction is worth analyzing and researching further.

2. Features of Mechanical Product Instruction
As a kind of technical text, the mechanical product instruction possesses both the the general characteristics of technical articles and its unique features as well, which will be analyzed from its lexical, syntactic and discourse level in the following part.

2.1 At lexical level: Nouns-dominated
It should be objective for words of mechanical product instruction to better contain the useful information, such as fundamental description on product, specifications, technical parameters, etc. For example, *Any Thermo King approved replacement part can be used in the performance of any warranty maintenance or repairs on emission control system parts or components, and must be provided without charge to the owner if the part is still under the California emission control system warranty* (Zhu Zhide, 2003). From this example, it can be seen that the nouns are in a high percentage. In addition, in this instruction, the nouns are always used as attributes, and the nouns used as adjective often could form long noun phrases.
2.2 At syntactic level: simple & imperative sentences dominated

Since not all readers are professional, in order to be understood easily, the sentences of specification are mostly simple and attributive clauses are rare. In addition, another characteristic of mechanical product instruction sentence level is that the imperatives are broadly used. Specifically, the imperatives are concise and strong enough to enable readers to understand some authority information. Different from other sentences of introduction, noun structure containing action nouns is not used in the imperatives. What’s more, in order to tell how to use the product, the mechanical instruction should offer some essential description about the usage time, environment, etc..

2.3 At discourse level: present tense & passive voice dominated

The present tense is generally used in mechanical product instructions. It can be used to illustrate objective truth and keep the content concise. In the respect of voice, the passive voice is often used in instruction in order to illustrate all about the product clearly. The product is emphasized directly in the passive voice and this can enable the readers to better understand functions of the products.

3. Guiding Theory: Linguistic Adaptation Theory

The linguistic adaptation theory, or adaptation theory was proposed by the Belgian linguist Jef Verschueren in 1999, in his opinion, use of language is a process in which the language works or language users choose the right way to express meaning. Here, the theory is reflected on a kind of mutual adaption between the environment and language structure. According to Verschueren, people’s language using is a constant choice-making process. “Using language must consist of the continuous making of linguistic choices, consciously or unconsciously, for language-internal (i.e. structural) and/or language-external reasons” (Verschueren, 1999). The related choices could be identified from the following five linguistic levels: from the basic phonetic and morphological levels, to the lexical and syntactic levels, and to the semantic level. When a theory is used, proper consideration of this “choice-making” should be considered seriously. And Verschueren (1999) claims that there are at least three hierarchically related notions which are needed in the understanding of the process of “choice-making” as the base-line description of language use. They are variability, negotiability and adaptability. Adaption theory plays an important role in guiding translation practice and meanwhile provides some useful hints and suggestions from three perspectives, including adaption to contexts, structural objects and dynamic adaption.

4. Translation Strategies for Mechanical Product Instruction

The translation of mechanical product instruction is not just a simple act of code translation, which requires translators to take into account linguistic and extra-linguistic factors. Based on Verschueren’s adaption Theory, it can be inferred that mechanical product instruction translation is a process of continuous making of adaptive choices for the language-internal and language-external reasons at varying levels of salience. The adaption theory provides the translator with a holistic view on the activity of mechanical product instruction translation.

4.1 Dynamic adaption to context

The contextual correlates of adaptability in mechanical product instruction translations are complicated. As for what major contextual correlates linguistic choices should adapt to, it is negotiated and the translator has to take into consideration both source writer-related elements and target reader-related elements. In respect of the way in which adaption is made, it is again negotiated and the translator should consider the differences between two languages representing two cultures. What is more, the process of making adaption is not without participation of translator-related elements, such as the translator’s purpose, language competence and knowledge of the two cultures.

Example 1
ST: 控制系统操作应在蓄电池最小电压状态下工作。应提供微处理器源程序，以便在将来空调
TT: The control system operation shall work under battery minimum voltage status. The microprocessor source program shall be provided, so that future changes in the air conditioning system adjustment may be done by using the software. In case the fans of the air treatment set get out of service, the corresponding refrigeration device shall be automatically put out of service.

Analysis: From this example, it can be seen that the phrase “air conditioning system” can well explain the concrete context of the instruction, and the “控制系统操作” first used at the beginning of the whole paragraph is a part of the air conditioning system. And the phrase “风机” in the following sentence can be regarded as one part of the air conditioning system, which uses mechanical energy to control the temperature of the cabin by transferring the gas in the cabin. That is why the translator uses “of the air treatment set” as a post-positive attributive to make “fan” different from the traditional meaning which is a kind of liquid machinery using mechanical energy to increase gas pressure and discharge the gas. In the same way, the use of “heat” and “penal” is also determined by the word “air conditioning system”. This example well illustrates the dynamic adaption to context in mechanical product instructions. On the one hand, the translator’s mental world changes with the communicative context and linguistic context of the source texts; on the other hand, the translator is also supposed to consider the contextual correlates, especially the horizon of expectation of the assumed target text readers. Therefore, the meaning generation in mechanical product instruction translation is a dynamic choice-making and adaption process during which the translator strives to achieve a balance between source text author and the target text reader by taking advantage of the three language properties.

4.2 Dynamic adaption to pragmatic strategies
The variability of language gives language users a series of choices. But communication is not a stable process but a continuously negotiable and dynamic process. In order to meet different communicative needs, language users will choose various strategies and redundant information strategy is one of them. Just like the other strategies, it is driven by different goals which can be divided into relational goals and instrumental goals. For one thing, the manufacturers want to maintain the relationship with their consumers. For another, the purposes of instruction translation are to give information about the products and to make the consumers believe the good quality of the products. To achieve those purposes, the translators sometimes adopt the redundant information strategy.

Example 2
ST: 由于陶瓷比钢铁更耐高温，美国和日本的公司制造没有冷却系统的陶瓷柴油机的样机，因此可以提高效率降低重量。

TT: Since ceramics can withstand higher temperatures than steel, US and Japanese firms have made prototype ceramic diesel engines that run without a cooling system, allowing higher efficiency and lower weight.

Analysis: In this example, it can be seen that the instruction can be translated in the same sentence order, in a reverse order. Actually, the process of choosing translation strategies is dynamic. It changes with the development of the translation activity. And to some degree, it is more related to the translators’ cognitive ability, translation skills, and personal preference. It is impossible for translators to choose only one strategy in the whole passage. They may vary their translation strategies in different parts of the instruction. Apart from the given personal reasons, it also can relate to the different functions in different parts. Thus, the choice of strategies used by the translators is also an adaption to the mechanical product instruction translations.

4.3 Salience of adaption concerning norms
According to Verschueren, “salience is basically a function of the operation of the reflective awareness involved in language use” (Verschueren, 1999). The linguistic choice-making process carried out through adaption has different degrees of salience, and some choices are virtually automatic while others are highly motivated. In the frame of mechanical products instruction translation, translation
can be regarded as a process during which the translator dynamically makes linguistic choices by employing difference layers of linguistic structure and context of the target discourse for language transformation and culture delivery under different degrees of salience (Song Zhiping, 2007). The definition of norms used by Toury is: “The translation of general values or ideas shared by a community-as to what is right or wrong, adequate or inadequate--into performance instructions appropriate for and applicable to particular situations”(Toury, 2001). Norms are socio-cultural constraints specific to a culture, society and time. An individual is said to acquire them from the general process of education and socialization. Therefore, Norms contribute to the stability of interpersonal relationships by reducing uncertainty. They make behavior more predictable by generalizing from past experience and making projections concerning similar types of situation in the future. They have a socially regulatory function.

**Example 3**

**ST:** 标准 3C 认证电源线……振动电机适用环境温度为 15-40℃。

**TT:** China Compulsory Certification standard power cord...... the environmental temperature of application is between 15 DEG C and 40 DEG C.

**Analysis:** In this example, “3C” is translated into China Compulsory Certification and “℃” is translated into “DEG C”, which is required by the relevant mechanical product instruction translation norms and can be regarded as the adaption to social salience. William and Chesterman (2004) point out that we deal with two kinds of variables in translation studies--those that have to do with the translation themselves and those that have to do with the world outside the translation, and the latter connects with aspects of translators’ context. The context can be understood in a broad sense. It can be divided into something that is related to spatial or temporal environment and something that is called socio-cultural context which includes norm, cultural values, and ideologies and so on. Then we can call the above social-salience in the mechanical products instruction translation one of the socio-cultural variables because this socio-salience is restricted by the mechanical products instruction norms and requirement of the client.

**4.4 Salience of adaption concerning purpose**

Like other forms of translation, certain purposes are also involved in mechanical product instruction translations. Consequently, purpose also becomes a factor influencing the salience shown in the adaption process. As is mentioned in the precious chapter, there are two purposes of instructions. First, they give detailed information about the products to persuade people to buy products. Second, they help to improve the image and the reputation of the company. When translating, translators should follow the two basic principles and give a relatively perfect text. In order to give precise information and give customers a deep impression, passive voice, imperative sentences and some short relative clauses are often used in the instructions, meanwhile since mechanical product instruction is different from other product instructions such as cosmetic instruction, there is no point in considering the aesthetic translation.

**Example 4**

**ST:** 为保证仪表清晰和使用寿命,本仪表不宜放在太阳直射下使用,放置地点应较平整。

**TT:** To ensure its clarity and maintaining life, the indicator should not be put under the direct sunshine. It should be settled in a plain place.

**Analysis:** To inform the reader of the potential dangers as a result of improperly use of the machine, and the correct procedure they should follow, the translator uses passive voice “should not be”, “should be kept from”, model verbs “should” and short relative clause “it is strictly forbidden” to strengthen its mood, thus to remind the readers to be careful about their actions. Once the reader gets the translator’s meaning, the salience of purpose is fulfilled. From the analysis, it is evident that translators sometimes tend to employ some strategies, which might not frequently be used in traditional translation studies, in order to achieve effects. The interrelationship of the four angles of
pragmatic investigation on which this thesis is based can be summarized with one sentence, “the general concern for the study of linguistic pragmatics is to understand the meaningful functioning of language as dynamic process operating on context-structure relationship at various levels of salience.” (Verschueren, 1999). Therefore, translators of mechanical product instructions are in a position to make adaptations with varying degrees, from word-for-word translating, partially substitution to wholly substitution.

5. Conclusion
Translating an mechanical product instruction is no easy undertaking in that it involves multistage and multi-layer choice-making for preserving its informative function in target text. In great measure, mechanical product instruction translation is seen as a process of adaption. In the present research Verschueren’s pragmatic perspective is used to study the phenomenon of mechanical product instruction translations. Adaption theory proves its wide applicability. As a new perspective on language use, this theory undoubtedly serves the research of mechanical product instruction translations. It academically justifies the claim that addition and recreation should fall within the category of translation as long as they are necessary. The paper also has educational implication since it will help trainee translators in developing their translation competence. Although it is a tentative study about mechanical product instruction translations, the study still provides some insights for producers when they are about to launch translation campaign.

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