

Chinese Translation of Trade Names of Imported Drugs from Perspective of Three-Dimensional Adaptive Transformation

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Abstract—With the globalization of Chinese pharmaceutical business, many foreign pharmaceuticals have entered the domestic market. An appropriate Chinese trade name will help promote the acceptance of imported drugs. This study selected some translated versions of imported drug names from the database of National Medical Products Administration, classified and analyzed these versions from perspective of three-dimensional adaptive transformation in the hope to find out the principles of E-C translation of trade names. The study concludes the translation principles as being objective and scientific, conforming to target language culture, being concise and intelligible, and arousing associations.

Index Terms—Database, E-C translation of trade name, imported drug, three-dimensional adaptive transformation

I. INTRODUCTION

Due to the ongoing liberalization of China's pharmaceutical business, an increasing number of foreign medications are streaming into the domestic market. Chinese version of drug trade name has become critical to gaining consumer identification and gaining market share.

Translation of medication trade name is a communication activity that takes place across cultural boundaries. The translator should consider the target audience's cultural background, expression habits, and psychological expectations to ensure the purpose of information transmission and meet the client's requirements. Furthermore, owing to the specific nature of medications, translators must not only understand information accurately, but also express information rigorously and scientifically. According to Chinese Medication Trade Name Principles (abbreviated as Principles in the article), the words given below are not allowed to be used in the trade names of imported drugs: (1) expand or imply the efficacy of drugs; (2) indicate the treatment site; (3) directly indicates the dosage form, quality, raw materials, functions and uses of the drug, and other characteristics; (4) directly represents the characteristics of the use object.

Therefore, under the premise of adhering to the relevant regulations, how to give an appropriate Chinese version of trade names of imported drugs which is accurate in drug information and acceptable for Chinese language and culture is a topic worthy of in-depth discussion among translators.

According to the Chinese National Knowledge Infrastructure (CNKI), only sixty-seven studies are related to the translation of medicine, and most of them are about drug instructions. Scholars seldom pay attention to the translation

of imported drugs. As a result of the research status, this research is designated to adopt the three-dimensional adaptive transformation to explore the regularity of Chinese translations of trade names of imported drugs. Through specific analyses and discussions of about 500 trade names of imported drugs, the translation theories and methods can be summarized and applied in translation practices.

II. THEORETICAL FRAMEWORK

A. Introduction to Approach to Translation as Adaptation and Selection

As early as in ancient China, the sages put forward an ecological view of "Heaven and Man Are United as One" [1]. These ecological wisdom and thoughts provided the basis for the formation of this theory. Subsequently, inspired by the global ecological trend of thoughts and the wisdom of ecological philosophy from ancient China, Professor Hu considered the "Adaptation/Selection" based on Darwin's theory of evolution as the philosophical basis, described and interpreted various phenomena involved in translation process from an ecological perspective, and proposed a new translation perspective — an approach to Translation as Adaptation and Selection [2].

After a series of studies, Hu [3] found that the views of adaptation, selection, survival, and elimination proposed by Darwin are interlinked with many situations in translation activities. For translators, adaptation means survival and development; for translated text, adaptation means survival and effectiveness. Therefore, the phenomenon of the preservation of strong ones and the elimination of weak ones is also common in the translation process.

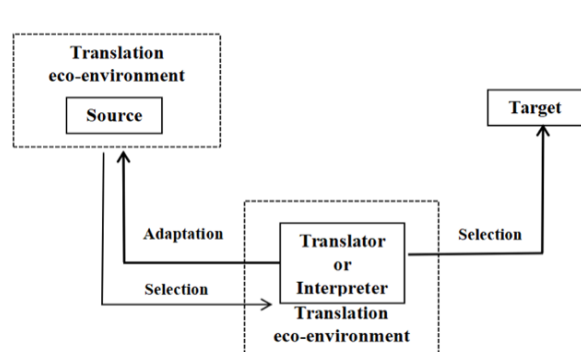


Fig. 1. Translation process based on the approach to Translation as Adaptation and Selection.

Under the guidance of "Adaptation/Selection", the approach to Translation as Adaptation and Selection makes the following interpretations of translation activity: Hu [4] argues that "translation is neither source-oriented nor

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target-oriented but translator-centered adaptation and selection”; the translation process is “an adaptation of the translator to the translation environment and a selection of the target by the translator” [3], as shown in Fig. 1; as the leader of translation activities, a translator needs to continuously adapt to and select on different dimensions such as linguistic dimension, cultural dimension, and communicative dimension, and flexibly adopt different translation methods and strategies until the best translation text is produced.

B. Core Terminology of Approach to Translation as Adaptation and Selection Theoretical Studies

The translation method based on the approach to Translation as Adaptation and Selection can be briefly summarized as “three-dimensional adaptive transformation”, including linguistic dimension, cultural dimension, and communicative dimension [3].

Adaptive transformation from the linguistic dimension focuses on “adaptive transformation to the language form of target language”, and this transformation includes conversion in phonics, semantics, language forms, etc [3].

Adaptive transformation from a cultural dimension means that translators should pay attention to the “transmission and interpretation of bilingual cultural connotations when translating” [3], that is, to adapt to the entire cultural system of the target language while converting the source language. In addition, the differences between the source language culture and the target language culture must be noted to avoid misinterpreting the original text.

Adaptive transformation from a communicative dimension emphasizes that the translator should “convey bilingual communicative intention” in addition to the transmission of language information and cultural connotations [3]. In other words, this kind of transformation requires the translator to attend to whether the communication intention in the original text is reflected in the translated text.

It should be emphasized that translation is a complex activity. In the actual translation process, linguistic factors, cultural factors, and communicative factors are often intertwined, interconnected, and interacted with each other. Therefore, the above three dimensions are not the only but primary ones to be considered in transformation. Additionally, in the translation process, translators should also actively adapt to and transform from other dimensions after completing the above three adaptive transformations.

C. Application of Multi-dimensional Adaption and Adaptive Selection

The degree of adaptability to the elements of the translation eco-environment determines the quality of the translated text. Therefore, the translator should first adapt to the translation eco-environment from multiple dimensions and then select the translated text with the highest degree of holistic adaptation and selection. This process of adaptation and selection suggests that translation for trade names of imported drugs is not a simple language conversion but a dynamic process that adapts to the translation eco-environment. However, it is impossible for translators to adapt to “all factors” of the translational eco-environment [5]. That means the translation principle guided by the approach to Translation as Adaptation and Selection can only be a multi-dimensional adaptation, and the translator must make a

selection of translated text that is compatible with the translational eco-environment on the basis of multi-dimensional adaptation. Translators need to consider different responses brought by different cultural backgrounds, thinking habits, and psychological expectations of the target audience and select the best translated text to ensure that the purpose of promoting the product is achieved and the appeals from the client are met.

In summary, the translation principles based on approach to Translation as Adaptation and Selection can be summarized as: “multi-dimensional adaptation and adaptive selection” [6], which requires that, during translation process, translator should adapt to the translational eco-environment from multiple dimensions in different levels and aspects, and then make adaptive selection and transformation accordingly.

III. TRANSLATION METHODS OF TRADE NAMES OF IMPORTED DRUGS

This study employed “Trade Name Database of Imported Drugs of National Medical Products Administration” as the main corpus source. The database originated from the official website of National Medical Products Administration, covering the general names, trade names, R&D companies, and other information about imported drugs. It is the most comprehensive database of imported drugs in China at present. Through a random sampling method, this study has collected imported drugs in the database in recent five years as the research subjects. We analyzed the selected subjects, and classified translation methods of the trade names of imported drugs into the following categories:

A. Transliteration

According to the Cambridge English Dictionary, transliteration refers to the act or process of writing words using a different alphabet. For the English pronunciation of the drug name, the near-pronunciation Chinese characters are used for translation, such as Lyrica (乐瑞卡) and Mobic (莫比可). Words with more syllables can be appropriately simplified, like Spasmomen (斯巴敏) and Mictonorm (迈通诺). They are originally multi-syllables in English, and after simplification, they have been transformed into three syllables in Chinese.

B. Semantic Translation

Semantic translation is the process of using semantic information to aid in the translation of data in one representation or data model to another representation or data model. Independent of the pronunciation of the source language, words with positive associative meaning in Chinese are selected for semantic translation, such as Brintellix (心悦达), Topamax (妥泰), and Renitec (悦宁定), which are intended to convey the meaning of “peace, health, and pleasure”.

C. Phono-Semantic Translation

Phono-semantic translation adopts the combination of transliteration and semantic translation and attaches great importance to retaining the pronunciation characteristics of the target language and the transmission of the cultural

connotation of the target language like Fosamax (福善美), Condylox (慷定来), and Dormicum (速眠安).

D. Homo-Phonic Translation

Translators select the phonetic or morphological characters that suggest the indication or action part of the drug for semantic translation, from which consumers can intuitively obtain some information about the efficacy of the drug, but does not violate Chinese Medication Trade Name Principles, such as Propecia (保法止), Viartril-s (维固力), Aclasta (密固达) and Zocor (舒降之).

IV. CASE ANALYSES OF E-C TRANSLATION OF TRADE NAMES OF IMPORTED DRUGS FROM PERSPECTIVE OF THREE-DIMENSIONAL ADAPTIVE TRANSFORMATION

A. Adaptive Translation from Language Dimension

The term “language transformation” refers to the translator’s adaptive selection and modification of language forms in the translation process. It is inextricably linked to national norms and culture, as well as thinking processes and habits of expression, and translation activities are going to be limited and influenced by these elements. As a result, when translating the trade names of imported drugs, the translator should not only accurately convey the information of the source language but also consider the language environment of the target language audience.

Example 1: Cipramil 喜普妙

Cipramil is prescribed as a treatment for depression. The word “Cipramil” comes from citalopram, an antidepressant belonging to a group of drugs called selective serotonin re-uptake inhibitors. The translation “喜普妙” adopts the method of phono-semantic translation. From the perspective of transliteration, both the Chinese and English names have three syllables. From the aspect of semantics, its Chinese translation not directly connects itself with depression but gives positive trend to patients, which conforms to Chinese Medication Trade Principles.

Example 2: Tanakan 达纳康

Tanakan is used in the treatment of young individuals with cognitive and autonomic deficits and headaches. The translation “达纳康” embodies the combined methods of transliteration and free translation, phono-semantic translation. At the linguistic level, the Chinese translation matches the phonetic features of English. At semantic level, the Chinese translation suggests the realization of good health, thus helping purchase behavior of the target customer.

Example 3: Propecia 保法止

Propecia is prescribed to men who suffer from male pattern hair loss on the vertex as well as the anterior mid-scalp region. Three translations can be found in China: “保康丝” in Hong Kong, “柔沛” in Taiwan and “保法止” in the Chinese mainland. Though translators have chosen different characters to describe the medicine, the same method as phono-semantic translation has been selected to translate. At the phonetic level, both “保法止” and “保康丝” have 3 syllables, the same as the origin text. Though “柔沛” only has 2 syllables, “沛” has a similar pronunciation with “PE”.

However, at the semantic level, the three versions refer to distinctive meanings. “保康丝” stands for keeping the hair on a healthy status; “柔沛” hints the hair is soft and moist; “保法止” is relevant to prevent hair loss for “法” has a similar pronunciation with “发”. Therefore, homo-phonetic translation has been integrated into the translation of “保法止”. Based on the *Principles*, “保法止” seems like a more appropriate translation according to the Principles.

The above three cases finally realize the transformation from linguistic dimension through simplification of syllables and adjustment of structure of the translated text and the word order, suggesting that in translation activity, the translator should not only focus on conveying the meaning of the original text, but also adapt to thinking and reading habits of target readers by transforming and creating flexibly.

It might also be noted that the adaption of one dimension does not exclude the adaption of other dimensions. Actually, in real translation process, linguistic factor, cultural factor, and communicative factor are often interconnected, and interacted with each other. Although the above cases mainly focus on the adaptation and transformation from the linguistic dimension, it is obvious that the translator has also taken into account the cultural and communicative factors when translating, which not only holds true for the cases above, but also is applied to the following cases.

B. Adaptive Translation from Cultural Dimension

Adaptive translation from a cultural dimension requires translators to place great emphasis on bilingual cultures since translation is not only a simple interlingual transformation but also a cross-cultural communication activity. As the German functional linguist Nord said: “Translation is all about cultural contraction” [7]. Chinese characters are highly choreographic, which always makes people subconsciously associate a word with a certain meaning [8]. When translating the trade names of imported drugs, Chinese characters with special meanings are mostly added to the translated names to create positive associations. Therefore, the adaptation and selection from cultural dimension is achieved.

Example 4: Euthyrox 优甲乐

Euthyrox is used to manage the body’s energy and metabolic processes in the absence of thyroid hormone.

The translation of Euthyrox combines both phonetic translation and semantic translation. In Chinese trade name, “优甲乐”, “甲” contains the partial meaning of thyroid itself, while “优” and “乐” symbolize positive trend from the cultural dimension. The Chinese characters not only satisfies the psychological expectations of Chinese readers, but also vaguely hinted the treated area by this drug.

Example 5: LANTUS (来得时)

This drug is indicated for patients with diabetes requiring insulin treatment. Its Chinese translation adopts phono-semantic translation. Literally, “LANTUS” does not have any meaning. If it is directly transliterated, it is difficult for the trade name to play its role in advertising and identification. Hence, the transliteration of trade name does not conform to the thinking mode of Chinese readers. Therefore, the English trade name is translated as “来得时” by means of transliteration and free translation.

On the one hand, “来得时” is concise, clear, and easy-to-remember. On the other hand, it tends to make Chinese people connect it with proverb such as “及时雨” which means “timely” in English. The completion of transformation from cultural dimension arouse the cultural resonance of Chinese consumers and has a good public adaptability.

Example 6: Mucosolvan 沐舒坦

Mucosolvan is part of a class of drugs known as mucolytics. Mucolytics work by reducing mucus viscosity in the upper airways, allowing its clearance. Through the combination of transliteration and free translation, its Chinese name “沐舒坦” finishes a cultural and linguistic shift. At semantic level, this medicine, aiming at decreasing mucus in the upper airways, is related to a Chinese character “痰”. Nevertheless, to follow the Principles, “痰” is not adopted here but “坦” that refers to comfort and has a similar pronunciation with “痰”. At linguistic level, the Chinese translation brings physical ease to patients and resonates well with Chinese customers.

In Chinese culture, people would like to hear something positive, which can bring a sense of tranquility and happiness to life. Therefore, translators are supposed to choose characters representing health and comfort. Among the trade names collected in this study, characters such as “安”, “舒”, “宁”, “喜”, “达”, “康”, and “乐” are also frequently used. Many trade names such as “Singulair (顺尔宁)”, “Condylox (慷定来)”, “Kenalog (康宁乐)” and the like, are intended to convey associative meanings of tranquility, health, and happiness. The frequent use of these words is the transformation made by translator after adaption to the culture and language environment of China.

C. Adaptive Translation from Communicative Dimension

Information is useless if it does not have any communicative function [9]. Essentially, translation is a process of communication. Therefore, in addition to considering language and culture in translation, the communicative dimension is supposed to be covered during the process. The goal of drug manufacturers is to pursue the maximum profit from sales, while on the other hand the possible patients also hope to buy the effective drugs conveniently. The translator, as a link between the pharmaceutical firm, doctors and patients, should by all means use adaptive selection and transformation of language and cultural dimensions to achieve the communicative goal of original drug trade names.

Example 7: Flumetholon 氟美童

“Flumetholon” is a drug for treating inflammation of bulbar conjunctiva, cornea, and other tissues of the anterior segment of the eyes. Transliteration and free translation has been put in its Chinese trade name. “氟美童” involved in the database simplifies the four syllables of the original text into three Chinese characters, which is concise, clear, and eye-catching. However, the character “童” may give potential customers a wrong information that the drug is indicated for treatment of pediatric diseases, which violates the efficacy of the drug. Accordingly, the author suggests that the “童” be replaced by its homonym “瞳” so as to conveying clearer and accurate information to the consumers.

Example 8: Glakay 固力康

This drug is indicated for increasing the bone mass of patients with osteoporosis and improving pain. Readers cannot obtain any effective information only from its English trade name, which makes the trade name lose its proper advertising and publicity function. For client of translation, their ultimate goal is to maximize the publicity of the trade name. For target readers, they want to gain more information about the indications and efficacy of drugs from the trade name. In light of that, the English trade name is translated as “固力康” by means of transliteration and free translation. From the linguistic dimension, the tones of the three characters “固”, “力”, and “康” are all falling tones or fourth tones, and sound sonorously and loudly. Here “固” implies “骨”, suggesting the drug is indicated for bone-related diseases. “固” has the meaning of strong and reliable in Chinese, suggesting that the effect of the drug is to strengthen the bones and body. The original meaning of the character “康” is tranquility and peace in Chinese, and here it means strong and healthy, which is in line with consumer’s expectations of being comfortable both physically and mentally, thus strengthening the publicity of trade name and realizing the transformation from communicative dimension.

Example 9: Zocor 舒降之

Zocor, a blood lipid regulator, is indicated for diseases such as hyperlipidemia, hypercholesterolemia, and coronary heart disease. When used as a verb, the character “舒” means smooth and comfort, conveying a sense of ease and relaxation, which conforms to the psychological preferences of Chinese consumers. Besides, the words “降之” sound like “降脂” meaning reduction of lipid. Through the method of homo-phonic translation, the indication and effect of the drug can be easily recognized by general customers so as to realize the publicizing effect of the trade name.

Leech divided the functions of language symbols into five types, namely “informative function, communicative function, vocative function, expressive function, and aesthetic function” [10]. The Chinese trade name of a drug, as a language symbol, primarily serves an informational and vocative purpose to convey drug-related information to clients in order to stimulate their purchasing behaviors. As a result, transliteration, free translation, and homo-phonic translation are all adopted to make a readable information to clients about the drug.

Similar trade names including “Aclasta (密固达)”, “NatriliX (纳催离)”, and “Trajenta (欧唐宁)” can also realize the publicity function of the trade name of imported drugs, all of which are successful transformations from the communicative dimension.

V. RESULTS AND DISCUSSION

The E-C translation techniques of imported drug trade names are listed, which include transliteration, free translation, a combination of transliteration and free translation, homo-phonic translation, and a combination of literal translation and free translation. Emotional appeal translation, logical appeal translation, and zero appeal translation are the three primary forms of translation.

According to the findings of the study, translators should adapt to as many factors in the translational eco-environment

as feasible and complete the multi-dimensional transformation while translating under the supervision of multi-dimensional adaptation and adaptive selection. The initial phase in the translation process should be linguistic dimension transformation, which is embodied in sound, shape, and meaning change. The second phase is cultural dimension transformation, which implies that the translated text must adapt to the cultural milieu of the target language. Ultimately, on the basis of the transformation from linguistic and cultural dimensions, the transformation from the communicative dimension must be achieved, which requires the translator to convey certain emotional or rational appeal information when translating, so that consumers can get effective information they want and the communicative intention of drug promotion can be realized.

VI. CONCLUSION

Based on the National Medical Products Administration database, this study has classified and analyzed the translations of trade names of imported drugs from the perspective of “three-dimensional” adaptive selection and transformation of the eco-translatology, and has concluded that five major principles should be followed, namely compliance with laws in target language country, being objective and scientific, conforming to target language culture, being concise and intelligible, and creating associations (including phonetic association, emotional informative association, and rational informative association).

For future studies, the cases enrolled can be expanded thus the reliability of the study can be improved. In addition, quantitative analysis and statistical analysis can be employed to explore the in-depth factors and reasons for different proportions of translation methods and types of translation.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Yujie Ren and Jinli Fan conducted the research, analyzed the data and wrote the paper in draft. As the corresponding author, Yan Wang fully supported the study and gave lots of useful advice to the revise the draft.

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