Methods of Terminology of e-C Transliteration and Patterns of Terminology in the 21st Century

Yan Shi¹, Chunrang Shi^{2,*} and Zhao Huifang³

¹ School of Foreign Languages, Northwest University, Xi'an, 710100, China

² Research Center of European and American Literature, Xian International Studies University, Xian, China

³ School of Translation Studies, Xian International Studies University, Xian, China

*Corresponding author

Keywords: Transliteration; Terminology; English-Chinese translation

Abstract: After entering the 21st century, science and technology develop rapidly, and bunch of English technical terminologies are translated into Chinese by Transliteration. Methods of terminology of E-C transliteration mainly include: 1) pure transliteration, 2) homophonic transliteration, 3) transliteration combined pronunciation with meaning, 4) form translation 5) zero translation, 6) omission transliteration. These transliterated terms appear in different texts in different patterns and play different roles.

1. Introduction

After entering the 21st century, science and technology develop rapidly. The exchanges between China and the rest of the world are becoming more frequent and more extensive. A lot of English technical terminologies are translated into Chinese by transliteration and people create new terms' transliterated methods consistently which are worthy to be summarized. Meanwhile, a lot of transliterated terms are appeared in many Chinese texts in different modes which are worthy to be summarized.

2. The definition of transliterated terms

Transliteration is a translation method in which words in one language are expressed by the same or similar pronunciation in another language.

In Chinese, people considered that terminology, which is mainly used to refer to technical terms, is a group terms which are to express definitions in specified subject field before. However, in 21st century, the semantic extensions of terms have been expanded. Terminology can also refer to some nouns that represent the social science concepts, which are named social science terminology. [1]

Before 21st century, when people in China translated terminologies, free translation was mainly used, while transliteration was merely used. After entering the 21st century, people are increasingly using transliteration to translate terminologies. Transliteration has been a common method to translate terms. Transliterated terms are terms translated by transliteration.

3. Methods of transliterated terms

Nowadays, people have used many methods to transliterated terminology. The main transliteration methods of terms are as follows.

3.1 Pure transliteration

Pure transliteration refers to the method of translating into Chinese characters with the same or similar pronunciation according to the pronunciation of English terms. For one hand, it can keep the sound beauty and calling function of source text, and for another, it can express English terms directly and fast for people in China. For instance, "clone" is translated into "kelong". "karst" is

translated into "kasite". Pure transliteration is that an English term matches Chinese term word for word with similar pronunciations according to the pronunciation of English language.

3.2 Homophonic transliteration

Homophonic translation refers to the translation of terms without being stick fast to the accuracy of the words' pronunciation, but choosing the Chinese characters with the same or similar pronunciation. The homophonic translation is based on the sound, and individual characters are often changed on the basis of pure transliteration. These characters are not the same as the common transliterated words, but they are similar and harmonic in pronunciation with the original terms, and usually masterly play the effect of free translation. [2] For example, "hacker" should be translated into "haike" based on pure transliteration, but translated into "heike" by homophonic translation. "heike" is not only the homonym of pronunciation of the English terms, but also can make Chinese readers understand the meaning after reading and make readers to know the meaning after combining two characters of hei (black) and ke (somebody special) together. "heike" means somebody who is in black suit, and with the black mask, breaks into houses and rob property at night skillfully. This is very close to original text, the meaning of the original term refers to somebody who is skillful to enter others' computer systems, destroy the computer system and steal the information.

3.3 Form transliteration

Some English technical terms include alphabets which can express the meaning of words vividly. When these words are translated, people usually adopt the method of copying and translating foreign letters into Chinese characters with similar fonts or concepts. This method which is used with alphabets or characters to express form is called form translation. It can be divided into two kinds as follows.

3.3.1 Transliteration with Chinese characters that can express the original letter form

The original letter image is presented by the characteristics of the image of the Chinese character in spelling, so that the shape of the item in the source language is clear at a glance and conforms to Chinese habits. For example, "V-slot" is translated into "san jiao cao (triangle slot)", in which san jiao (two Chinese characters) looks like V (an English alphabet). "I-column" is translated into "gong zi zhu, in which gong (one Chinese characters) looks like I (an English alphabet), and zi expresses the concept of species.

3.3.2 Transliteration with English alphabet

In the English terms, English alphabet being the part in the terms is simple, vivid and is easy to be understood by Chinese readers, so English alphabet would be transplanted into Chinese when the terms are transliterated. For example, "C-network" is transliterated into "C xing wang luo", in which C is kept as the English alphabet, xing means the concept of species in Chinese, and wang luo means network in Chinese. "D-valve" is transliterated into "D xing fa", in which D is kept as the English alphabet, xing means the concept of species in Chinese.

3.4 Transliteration combined pronunciation with meaning

Transliteration combined pronunciation and meaning refers to the method of partial transliteration and partial free translation when translating terms. The transliteration combined pronunciation and meaning can be divided into three kinds. The first one is transliteration with the former part being free translation, like the term which contains the name of a person. For example, "Whitworth thread" is transliterated into hui shi luo xuan, in which hui shi is transliterated from Whitworth, and luo xuan (pronunciation of two Chinese characters) means thread. "Morse code" is translated into mo er si dian ma, in which mo er si is transliterated from Morse, and dian ma (pronunciation of two Chinese characters) means code. The second one is transliteration with the later part being free translation, in which the former morpheme of the term is paraphrased to distinguish the meaning of terms, and the later part is transliterated. For example, "centrifugal

pump" is transliterated into "li xin beng" in which li xin expresses the connotation of the term, and beng transliterated to express pump. The third one is transliterated both sound and meaning. For example, "gene" is transliterated into "ji yin". It is not only close to the original word in pronunciation, but also has the literal meaning of "basic genetic factors", which exactly expresses the concept of "carrier of genetic information passed down from generation to generation".

3.5 Zero translation

The term "Zero translation" was put forward by Qiu Maoru in 2000. He proposed that "zero translation" is used to solve the untranslatable problems. In his opinion, "zero translation" is to translate the words of source language without using the words or phrases in target language. [3] Later, it is believed that "zero translation" is a method copying that in English technical terms. It is possible that the English technical terms copied directly is monosyllabic word, like "word"; multi-transliterated words, like "windows", or phrases, like "Facebook", "Windows Media Player", "multiple independently targeted reentry vehicle", or abbreviations, like "CT, DNA, CDMA".

3.6 Omission transliteration

Omission transliteration means only transliteration part of syllables of English terms, while omitting other syllables. This method is often used to transliterate English terms consisting of some polysyllabic names. If the polysyllabic names is translated into Chinese one by one, Chinese readers will feel hard to read and memorize. So omission transliteration is simple and effective. For example, "Redwood viscosimeter" is translated into "lei wu nian du ji" instead of "lei de wu de nian du ji".

4. Patterns of transliterated terms

In 21st century, people from all walks of life can use various texts containing different forms of technical terms. Some kinds of texts still keep the features of traditional texts, while the rest of texts are newly created. In different kinds of texts, there are a lot of transliteration terms which present the different patterns.

4.1 Proper nouns

In 21st century, scientific technology develops rapidly. All kinds of proper nouns about new conceptions, information, products and achievements emerge endlessly. In each field, after some professional transliteration terms emerge, they permeate into people's daily life and then become the common words, For example, "OA(Office Automation),GPS(Global Position System),CT (Computed Tomography)".

4.2 Terms in multi-contexts

Terms are called terms because of their application in specific fields and contexts. In 21st century, many new texts which include technical texts, literature texts, application texts (advertisements, brochures and application form), oral communication, film and television works, as well as mobile network texts, are produced in new contexts. In technical texts, with the development of scientific technology, some scientific and technical terms like 5G, AI, VR are frequently used. In mobile network texts, terms like WiFi, ID and IP are widely used.

4.3 Terms in many different modes

Terms can be classified into free translation terms, the combination of full name and acronym, Chinese and English mixed terminology, for instance:

4.3.1 Transliteration terms in science and technology dissertations

Based on LS-SVM, this article proposes the "VFDR". This design is made full use of nonlinear mapping capability of LS-SVM, then are combined LS-SVMS with LS-SVMR subtly, and reconstruct by the interaction between LS-SVMS and LS-SVMR.

This is an abstract of science and technology paper, in which some English terms like LS-SVM,VFDR, LS-SVM,LS-SVMS,LS-SVMR are used in the paper in Chinese journals.

4.3.2 Transliteration terms in ordinary newspapers

"Now the most famous physical arbitration organization is CAS which was built in Lausanne, Switzerland in 1984".

The Executive Board of the International Monetary Fund (IMF) announced on the 25th that Cristalina Georgieva will become Managing Director of IMF on October 1 for a term of five years.

These sentences are abstracted from ordinary newspaper in Chinese. In the sentences, the full names of international organizations are presented in Chinese, but after the full name, the English acronyms are specifically enclosed in brackets. These acronyms have been the common terms used by ordinary readers, who usually can't speak the whole name of the international organizations, but can say their English acronyms fast and concisely.

4.3.3 Transliterated terms in translated texts

If you use the Internet regularly, your activities are likely spread out all over the Web. You might be sharing photos on Flickr, emailing via Hotmail, posting status updates on Facebook, following tweets on Twitter, sending instant messages on Google Chat and keeping a calendar on Apple's MobileMe. You hop from one site to the next, juggling different user names and passwords.

In the translated passage, six terms, Flickr, Hotmail, Facebook, Twitter, Google Chat, MobileMe all keep their original forms in this translation, which contains the key information. If they are translated into Chinese, accuracy of information and the convenience are both far less than the effects of free translation.

4.3.4 Transliterated terms in the oral discourse of scientific and technical personnel

Scientific and technical personnel usually use bunch of professional terms in their daily oral communication discourse, in which the forms of English terms are kept. For example, they say terms like "Word, Excel, Internet Explorer, Windows Media Player, DAEMON Tools, Adobe Reader, Realplayer, PowerPoint, FlashGet, Photoshop, ACDSee, CAJViewer, WinZip, Winamp, WinRAR, Facebook, Eclipse, Twitter, Gmail, NET, Ruby on Rails, Wikipedia, Foursquare, iOS, Hadoop" instead of free translation for these terms.

Many terms are generated by adding meanings to everyday vocabularies. However, due to the huge differences in word formation between English and Chinese, many English terms converted from everyday vocabulary are difficult to translate into Chinese. Li Dan, Chinese scholars, believes that as the development of science and technology, many English terms will form a general mechanism, which will form a potential connection, and run through the entire translation process of understanding, conversion and expression in Chinese translation. ^{14]}The direct use of English terminology by computer personnel in daily communication is a sharp example. It can be predicted that in the future, with people's understanding and use of different professional scientific and technological knowledge, transliteration of many scientific and technological terms will become common words which will be convenient for people to use.

5. Summary

In the 21st century, with the rapid development of science and technology in various fields, new terms have emerged one after another, like the mushroom in spring. The needs and methods of using new terms are also diverse. Therefore, people creatively produce new transliteration methods of terms and use transliterated terms in different texts. These transliterated terms also show different patterns which also have a new impact on the formation of Chinese word, Chinese text and Chinese culture.

Acknowledgement

The research has been supported by humanities and social science research fund from China's ministry of education (Fund No. 15YJA40037), Xi 'an International Studies University (Fund No. 18XWD24), and 2018-2019 research fund of the Chinese Culture Going out Collaborative Innovation Center of Beijing Foreign Studies University (Fund No. CCSIC2018-YB02).

References

[1] Gong Yi. Principles and methods of social science terminology. Beijing: commercial press, 2009, 285.

[2] Qan Chengqiang, Shi Chunrang. Transliteration of terminology and its innovation. Terminology of Chinese Science and Technology, 2011(5):40-42.

[3] Qiu Maoru. Translatability and zero translation. Chinese Translators Journal, 2001(1):24-27.

[4] Li Dan. overall mechanism and the process of terminologized translation in daily expression. China Science and Technology Translation, 2013 (2): 1-4.