A STUDY OF DICTIONARY USE IN CHINESE-ENGLISH TRANSLATION BY CHINESE EFL LEARNERS

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ABSTRACT:

This study investigated, with a think-aloud protocol, how four college Chinese learners of English actually used dictionaries when doing L1-L2 (Chinese–English) translation. The research questions were: (1) What are the target lexical items for dictionary consultation?, (2) What types of dictionary do the subjects use?, (3)What are the purposes of dictionary use?, (4) How do the subjects utilise the dictionary information?, and (5) What is the effect of dictionary use?

The main findings were: (1) most of the target lexical items for dictionary consultation were Chinese, most of which are difficult to express in English; (2) the use of the Chinese-English bilingual dictionary prevailed in the translation task; (3) searching for English equivalents of the Chinese lexical items was the primary purpose of dictionary consultation; (4) most expressions utilised in the subjects' target language translations were English definitions of the Chinese headwords in the dictionaries consulted, the typical means of utilising the dictionary information was the direct transfer method, and the first-equivalent tendency was prevalent; (5) dictionary use showed a positive effect in terms of appropriateness of the expressions used in the subjects' translations.

KEY WORDS

Dictionary Use; Chinese-English Translation; Chinese EFL learners

RESUMO:

Usando a técnica do protocolo oral, examinou-se neste estudo como quatro universitários chineses, aprendizes de inglês, usaram dicionários ao traduzirem do chinês para o inglês. As perguntas de pesquisa eram: (1) Quais itens lexicais são consultados? – (2) Que tipos de dicionários são usados? – (3) Qual é a finalidade das consultas? – (4) Qual é o efeito do uso do dicionário?

Os principais resultados são: (1) A maioria dos itens lexicais procurados eram palavras ou expressões chinesas em inglês. – (2) Prevaleceu o uso de dicionários bilíngues chinês-inglês, em geral, são difíceis de serem expressas em inglês. – (3) A finalidade mais comum das consultas era encontrar equivalentes rios bilíngües chinês-inglês. – (4) Na sua maioria, as palavras e expressões empregadas nas versões eram as definições em inglês. Via de regra, os sujeitos faziam uma transferência direta da em inglês das palavras-entrada chinesas. – (5) O uso de dicionários teve um efeito positivo, levando ao informação encontrada no dicionário, no emprego de itens lexicais mais apropriados em inglês.

PALAVRAS-CHAVE

Uso de dicionários; tradução chinês-inglês; aprendizes chineses de inglês

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1. Introduction

The dictionary is a tool commonly used in translation. "One could argue [...] that translation is likely to require greater reliance on reference books than any other FL skill and is thus bound to produce more instances of dictionary use and misuse." (TOMASZCZYK, 1987) We still lack information as to whether EFL learners can make effective use of dictionaries in translation. This is a study of dictionary use by Chinese EFL learners undertaking Chinese-English (L1-L2) translation tasks.

2. Some related studies

To set the study in context, a brief review of some related dictionary use studies is provided, with special reference to the five aspects which the present investigation covers. Not all the studies under review are about dictionary use in L1–L2 translation, and not all of them use a reliable method; nevertheless they can serve as the context and the basis for this research.

Target lexical items for dictionary consultation: Difficulty is one crucial factor determining the target lexical items for dictionary consultation. For instance, when translating a book of a technical nature from Polish into English (L1-L2), Tomaszczyk (1989) reported that 81.3% of the lexical items he looked up were specialized terms. Hulstijn (1993) found that words whose meanings could be inferred from the context were looked up less frequently than words whose meanings could not be inferred easily. Bogaards (1998) discovered that "infrequent words", "allosemic words" and "faux amis" were the main target items for dictionary consultation. Specialized terms, words which cannot be inferred from the context, infrequent words and allosemic words are usually difficult for translators to express in a foreign language.

Types of dictionaries used: In a translation task, different types of dictionaries may be used, depending on the needs of consultation. Atkins and Varantola (1997) found that the subjects preferred bilingual dictionaries (72%) to other types of dictionaries for look-ups in L1–L2 translation.

Purposes of dictionary use: Looking for equivalents[2] is found to be one important purpose of dictionary use in translation. Mackintosh (1998) reported that in L2–L1 translation the subjects' need for an equivalent accounted for 32.3% of look-ups. Similarly, Sánchez Ramos (2005) found that students used

the bilingual dictionary mainly to look for equivalent terms (80.6%)[3]. Varantola (1998) reported that in her study the objective of 32% of the look-ups in L1–L2 translation was to find unknown equivalents.

Methods of using dictionary information: Dictionary users do not utilise all the information supplied in an entry; instead, they tend to focus on information found at the beginning of an entry. Li (1998) found in her study that 27% of the look-ups resulted in mistranslations due to several factors, one of which was that her subjects tended to choose the first equivalent in the dictionary entry for their L1–L2 translation. This coincided with the tendency found by Tono (TONO, 2001, p. 149).

Effect of dictionary use: Dictionaries are, generally speaking, a useful tool as demonstrated in the study by Tomaszczyk (1987), who showed that the majority of errors would have been avoided if dictionaries had been used with greater skill or if they had been used at all. However, dictionaries (especially bilingual dictionaries) may sometimes exert a negative effect on the translation since the equivalents in a dictionary may not suit the context of the translation. If the users transfer the equivalents directly into their translations, inappropriate expressions may occur. This was found by Ard (1982), who studied bilingual dictionary use in writing and found that bilingual dictionaries could cause certain lexical errors.

3. Research questions

The present study attempts to answer the following specific questions concerning dictionary use in Chinese-English (C-E) translation:

(1) What are the target lexical items for dictionary consultation?

(2) What types of dictionary do the subjects use?

(3) What are the purposes of dictionary use?

(4) How do the subjects utilise the dictionary information?

(5) What is the effect of dictionary use?

4. Research methodology

This survey intends to investigate how subjects actually use dictionaries when doing L1–L2 (Chinese-English) translation. To serve this purpose, a thinking-aloud protocol was employed and what the subjects said while translating and using dictionaries was recorded. The method provides a more detailed record of the whole procedure of dictionary use, and is particularly helpful when speculating about the cognitive processes of dictionary use in C-E translation.

3 The report does not indicate the type of translation in which dictionaries are used.

4.1 Subjects

Four college juniors (2 males and 2 females) from the Guangdong University of Foreign Studies took part in this study. They had learned English for about 11 years before they started their university education and had studied English for three years at the university. They were English majors and had learned both Chinese-English translation and English-Chinese translation in class. They had little experience of authentic translations. The four participants in this study were selected because they were interested in this survey, and their English proficiency was not taken into account. As they were in the third grade at the university, they could be regarded as a typical group of college students.

Two subjects (1 male and 1 female) were asked to translate Source Text 1 into English, while the other two (1 male and 1 female) were required to translate Source Text 2 into English.

4.2 Source Texts

The material for translation in this survey consists of two L1 (Chinese) texts, of 190 and 265 Chinese characters respectively. Source Text 1[4] is a general description of a scenic spot written in a neutral style. Source Text 2[5] is an introduction to a company written in a semi-technical style and contains quite a number of business terms. The use of two texts belonging to different genres should help to unveil the nature of dictionary use in translation.

4.3 Dictionaries

The dictionaries provided for the subjects included a Chinese-English (C-E) bilingual dictionary, an English-Chinese (E-C) bilingual dictionary, and an English-Chinese (E-E-C) bilingualised dictionary. The dictionaries used by the subjects were as follows:

1) DAI, Mingzhong, DAI, Weidong. *A Comprehensive Chinese-English Dictionary* (Compact Edition). Shanghai: Shanghai Foreign Language Education Press, 1993.

2) Editorial Division. *A Modern Chinese-English Dictionary*. Foreign Language Teaching and Research Press, 1988.

3) Editorial Group. *Chinese-English Dictionary of Science and Technology*. Beijing: National Defence Industry Press, 1999.

4 LU, Naisheng. *Language Barriers in Translation*. Shanghai: East China Academy of Chemical Industry and Engineering, 1993. p.148.

5 CHEN, Hongwei. *Essential Translation from Chinese into English*. Shanghai: Shanghai Foreign Language Education Press, 1998. p. 295.

4) WEI, Dongya. *A Chinese-English Dictionary* (Revised, Compact Edition). Beijing: Foreign Language Teaching and Research Press, 1997.

5) WU, Guanghua. *Chinese-English Dictionary*. Shanghai: Shanghai Jiao Tong University Press, 1993.

6) GU, Renao. *A Comprehensive English-Chinese Dictionary of Science & Technology*. Beijing: The Commercial Press, 1997.

7) COWIE, Anthony. *Oxford Advanced Learner's English-Chinese Dictionary* (4th ed.). [Translated by Beida LI.] Beijing: The Commercial Press, Oxford University Press, 1997.

No. 1-5 are C-E bilingual dictionaries, No. 6 is an E-C bilingual dictionary, and No. 7 is an E-E-C bilingualised dictionary.

4.4 Procedures

Before they began the translation task, the subjects were given detailed instructions about how to think aloud, and given the opportunity to practise, to ensure that they knew how to think aloud while translating.

They translated the Chinese text into English one by one and reported aloud what they were thinking and doing. The think-aloud protocols were recorded for later analysis. At the same time, the author took notes of the subjects' dictionary use processes.

The raw data consisted of observation notes, transcribed protocols, and the translations produced by the subjects.

5. Results and Discussion

The results are presented below.

5.1 Target lexical items for dictionary consultation

Two types of target lexical items (words or multi-word units) are discussed here: an item searched for and an item looked up. An item searched for is the item that is related to one specific problem in the translation task. When a problem comes up and a search is made, the target lexical item of that search is called an item searched for. A search may be realised by one single look-up or more than one look-up. The target lexical item for a look-up is called an item looked up (see ATKINS; VARANTOLA, 1997, for the distinction between a "search" and a "look-up"). For example, in this study, sha (yarn) was an item searched for because one subject regarded it as a problem and consulted two different dictionaries for this; one look-up was counted for each consultation. The target of the first look-up was sha while that of the second was yarn (the subject looked it up for its pronunciation). In this case, there was one item searched for but there were two items looked up. Thus the items looked up may exceed in number the items searched for.

5.1.1 Target lexical items searched for

Of all the target lexical items searched for[6], 84.44% were Chinese lexical items and only 15.56% were English ones. The result of a Chi-square test indicates that there is a significant difference at the 0.01 level between the number of Chinese and English target lexical items ($\chi^2 = 57.25$, $p < 0.01$).

Items	Number	%
Chinese items	63	96.92
English items	2	3.08
Total	65	100

Table 1: Lexical items searched for

5.1.2 Target lexical items looked up

Of all the target lexical items looked up[7], 84.44% were Chinese lexical items and only 15.56% were English ones. The result of a Chi-square test indicates that there is a significant difference at the 0.01 level between the number of Chinese and English target lexical items($\chi^2 = 42.71$, $p < 0.01$).

Items	Number	%
Chinese items	76	84.44
English items	14	15.56
Total	90	100

Table 2: Lexical items looked up

Discussion: The results indicate that Chinese lexical items searched for/looked up dominated as dictionary consultation targets. These results were probably determined by the nature of the task (translating from Chinese into English, i.e. encoding in English the meaning of the Chinese text). Looking for appropriate English expressions was the primary reason for using the dictionaries.

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6 Some lexical items were the same as they were searched for repeatedly.

7 Some lexical items were the same as they were looked up repeatedly.

Further analysis revealed that most of the target Chinese lexical items searched for/looked up were difficult lexical items such as idioms (e.g. *dupi xijing* (open a new road for oneself; have a new style of one's own)), or special terms (e.g. *zhexue* (philosophy), *faren* (juridical person), *qihuo* (futures)).

The above findings, generally speaking, are in agreement with those of prior relevant studies, i.e. that difficulty is one of the factors determining dictionary consultation.

5.2 Dictionaries used

It was found that use of the C-E bilingual dictionary prevailed in the translation task, involving 84.44% of the look-ups. There is a significant difference at the 0.01 level in the use frequency of the three types of dictionaries (χ^2 = 108.20, p < 0.01).

Dictionary Types	Number	%
C-E bilingual dictionary	76	84.44
E-E-C bilingualised dictionary	13	14.44
E-C bilingual dictionary	1	1.11
Total	90	100

Table 3: Types of dictionary used

Discussion: The overwhelming use of C-E bilingual dictionaries coincided with the task for which dictionaries were used, i.e. C-E translation in which the main task was to find English expressions to be utilised in the target language translation (see next section).

5.3 Purposes of dictionary use

Searching for English equivalents for the target Chinese lexical items was the primary purpose of dictionary consultation, accounting for 94.44% of look-ups. The Chi-square test indicated a significant difference among the 4 categories of purposes (χ^2 = 151.27, p < 0.01).

Purposes of use	Number	%
English equivalents	85	94.44
Pronunciation of English equivalents	3	3.33
Spelling of English equivalents	2	2.22
Total	90	100

Table 4: Purposes of lookup

Discussion: The chief purpose of using dictionaries in C-E translation was to look for English equivalents for the Chinese target lexical items. Therefore, it is reasonable to say that the main motivation for consulting dictionaries was to look for appropriate English expressions to convey the meaning of Chinese expressions.

One interesting finding is that dictionary use sometimes served a purpose other than that imposed by the task. For example, it was found that one of the subjects consulted a dictionary for the pronunciation of an English word, although this information was not required by the written C-E translation task. This indicates that when we design the types of information in a dictionary, it is necessary to consider all possible needs or lookup behaviours of the potential users.

5.4 Utilisation of dictionary information

5.4.1 Sources of expressions in translation

The analysis of the results of dictionary use in translating Source Texts 1 and 2 shows that most expressions utilised in the subjects' translations (85.25%) came from the English definitions of the Chinese headwords (both main headwords and sub-headwords) in the dictionaries consulted. The result of a Chi-square test (χ^2 = 74.59, p < 0.01) further supports this finding.

Sources of expression	Number	%
Definitions	52	85.25
Examples	7	11.48
Head words	2	3.28
Total	61	100

Table 5: Sources of expressions in the translations

Discussion: The high percentage of English definitions in the translations might be explained as follows: Firstly, as mentioned in the previous section, this was determined by the main purpose of dictionary consultation. In C-E translation, C-E dictionaries are primarily consulted to find appropriate English

expressions to convey the meaning of the lexical items in the Chinese source text. In a C-E dictionary, the basic information provided is the English definition of the corresponding Chinese lexical item. Secondly, the finding that most of the expressions used in the translations came from the "definition" component implies that the subjects did not bother to read the whole entry although there might have been other components such as "examples", usually placed after the definitions. Thirdly, another reason might be that the C-E dictionaries lacked other components such as "examples" containing the expressions needed for the translation task.

5.4.2 Means of utilising dictionary information

The typical means of utilising the dictionary information is the direct transfer method (81.54%). This was confirmed by the result of the Chi-square test (χ^2 = 68.34, p < 0.01). The subjects tended to utilise the dictionary information directly. They just transferred the English expressions found in the dictionary into their translations.

Means of utilising dictionary information	Number	%
Direct transfer	53	81.54
Adaptation	8	12.31
Self-expression	4	6.15
Total	65	100

Table 6: Means of utilising dictionary information

Discussion: The above results imply that the subjects were employing a strategy of "ease" or "economy" — doing things with the least effort. They did not want the trouble of considering whether the expressions in a dictionary are suitable or not in the context of the target text.

5.4.3 First-equivalent tendency

In this paper, the first-equivalent tendency means that the subjects tended to choose the first equivalents from the "definition" component in cases where there were more than one equivalent of the headword (or of the sub-headword). The frequency of choices of the above-mentioned first equivalents amounted to 23 (covering 63.89% of all the number of equivalents utilised in the translations). The first-equivalent tendency was further verified by the result of the Chi-square test (χ^2 = 45.39, p < 0.01).

Choice of equivalents	Number	%
1st equivalent	23	63.89
2nd equivalent	6	16.67
3rd equivalent	4	11.11
4th equivalent	2	5.56
5th equivalent	1	2.78
Total	36	100

Table 7: Choice of equivalents

Discussion: It can be tentatively concluded that, as with other types of dictionaries, the first-equivalent tendency could be applied to the use of C-E dictionaries. The underlying reasons might be: Firstly, the first equivalents might have appeared to the subjects to be more important than the other equivalents since they were placed at the beginning of the entries. Secondly, the subjects might not have liked to scan the whole entry in the course of searching for the needed information. Thirdly, none of the C-E bilingual dictionaries used by the subjects contained meaning discriminators (and only one contained labels indicating the field in which the equivalents were used) which would have helped the subjects to choose other equivalents other than the first. Most of these dictionaries just gave various definitions for a headword, without any explanation. For example, in A Chinese-English Dictionary [Beijing: Foreign Language Teaching and Research Press, 1997, Revised, Compact Edition], for the entry of *du pi xijing*, two equivalents ("open a new road for oneself; develop a new style or a method of one's own") were listed without any further information.

5.5 Effect of utilising dictionary information

The effect of the English expressions used in the translations was evaluated by the author. Only those expressions which were the result of direct transfer or adaptation from the dictionary information were considered. Two types of effects (appropriate and semi-appropriate) were found. The English expressions in the translations were regarded as semi-appropriate when they were (1) not accurate in terms of equivalence (e.g. "knit, cotton and wool goods" was a combination which could not convey the full meaning of the corresponding Chinese lexical unit.), (2) not capitalised as required (e.g. "teachers training college" should be capitalised as it was part of a proper name), (3) not completely suitable in the context (e.g. "open a new road for myself" was not suitable in the context as a figurative meaning was used in the source text), (4) not the right technical terms [e.g. "entrusted [agent]" should read "commission and agency [representation]" according to the source text], (5) not properly spelled (e.g. "fragrant" was wrongly spelled as "fragant"), and (6) not appropriate in terms of word class (e.g. "coope-

rate [manufactur[e]]" should be replaced by an adjective such as "cooperative".

It was found that most of expressions (85.00%) which had been transferred directly or adapted from the dictionaries were acceptable in the translations[8]. This was further confirmed by the result of the Chi-square test [$\chi^2 = 29.40$, $p < 0.01$].

Effect of utilising dictionary information	Number	%
Appropriate	51	85.00
Semi-appropriate	9	15.00
Total	60	100

Table 8: Effect of utilising dictionary information

Discussion: The high percentage of appropriate expressions in the students' translations indicates that dictionaries might provide useful information for L1–L2 translations when the effects of the related expressions were considered in terms of acceptability in the target language translations.

6. Conclusion

The results concerning dictionary use in C-E translation reported above are tentative, because the use of a dictionary in C-E translation – a complex cognitive activity – involves many factors, sociopsychological, psycholinguistic, etc., which cannot be easily measured. As Nesi (2000, p. 2) points out, "Dictionary use is not an easy affair to explore. Essentially it is a private affair, easily distorted by intrusive investigative techniques." The sample in this study is also rather small.

However, these findings should shed some more light on dictionary use in C-E translation and help dictionary compilers to design a suitable model for compiling a C-E learner's dictionary for Chinese EFL learners.

Further research, of course, is still needed for dictionary use, which is "a lively research area" (HARTMANN, 2003, p. 277). A more systemic, detailed, comprehensive survey on larger and varied samples is necessary before a clearer picture of dictionary use in C-E translation can be obtained.

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