Application of Parallel Corpora in Translation Teaching Class

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Abstract. In recent years, with the development of corpora-based study, the accessibility of parallel corpora provides language learners and authors with great opportunities in translation teaching and learning. In this paper, the author does an experiment to prove subjects can solve the practical problem of finding proper equivalents in the process of translation with the help of parallel corpora.

Introduction

A corpus can be defined in terms of both its form and its purpose. A corpus is a collection of linguistic data, either written texts or a transcription of recorded speech, which can be used as a starting-point of linguistic description or as a means or verifying hypotheses about a language [1]. A corpus is a collection of naturally occurring language text, chosen to characterize a state or variety of a language [2]. There can be no doubt that corpora have revolutionized the way that we study and teach language[3,4]. Parallel corpora is widely used in language teaching, especially in listening, writing and oral class, but it is seldom adopted in translation teaching class. Therefore, an experiment is conducted to compare the subjects' translation versions from the two groups with different translation tools to investigate that parallel corpora can be helpful in finding proper equivalents in the process of translation to increase the quality of students' translation versions.

Objectives and Subjects

The author mainly focuses on the translation of words and phrases since parallel corpora, which consist of source text in language A along with their translated versions in language B, can work as invaluable sources of information for discovering typical and well established translation equivalents of given terms and expressions.

The general objective of the paper is to testify if subjects who translate with the help of parallel corpora perform better than those using conventional dictionaries when they translate the same materials. Specifically, the research is to check if the application of parallel corpora can help college subjects to solve the practical problem of the appropriateness of the translation candidates for words and terms. 80 sophomores of two groups from the department of computer technology in Chifeng University will attend the experiment as subjects. There are several reasons for choosing those students as subjects.

Firstly, they are going to attend the CET4, in which C-E translation is one part of it. Secondly, as sophomores, they have the basic ability to translate with the help of

translation tools. Thirdly, the students have some computer skills, which are necessary for operating corpora. Students with the related operating skill can easily query corpora to extract the kind of information they need.

Test Material and Tools

Test materials are selected from CET4 Model test, including sentences translations and paragraph translations. In the experiment, PACCEL (Parallel Corpus of Chinese EFL Learners) will be used. PACCEL, which is led by Professor Wen Qiufang and Wang Jinquan from Beijing Foreign Studies University, is the first large scale Chinese-English parallel corpora of Chinese English foreign language learners in China. The parallel corpus conclude two sub-storehouses, one is for spoken learning (PACCEL-S), which contains approximately five million words, the other is for written learning (PACCEL—W) with about sixteen million words. The contents of the parallel corpora are tests and exercises of juniors or seniors of English majors from eighteen colleges and universities all over the country. In the experiment, the author applies the PACCEL-W as the translation tools in translation practice, which contains the texts in Chinese and their translations in English, and the degree and the scale well meet the need of solving the problems of College English Test 4 and College English Test 6.

In addition, the author also uses some online corpora as translation tools in the experiment, parallel corpora in CQPweb: Babel English-Chinese Parallel corpora *The Babel English-Chinese Parallel Corpus*, which was created on the research project *Contrasting English and Chinese,* consists of 327 English articles and their translations in Mandarin Chinese. Of these 115 texts (121,493 English tokens plus 135,493 Chinese tokens) were collected from the *World of English* between October 2000 and February 2001 while the remaining 212 texts (132,140 English tokens plus 151,969 Chinese tokens) were collected from *Time* from September 2000 to January 2001. The corpus contains a total of 544,095 words (253,633 English words and 287,462 Chinese tokens), whose website is: http://124.193.83.252/cqp/ . Another English-Chinese parallel corpus with 215,713 sentences including 3,290,670 English words and 5,370,429 Chinese characters is powered by professor Lu Wei from Overseas Education College of Xiamen University. The website is: http://www.luweixmu.com/.

A concordance, a computer program working as corpus analyzing tool, can automatically construct a concordance. In the experiment, the author chooses the concordance Paraconc to be corpus analyzing tool. Paraconc was designed and produced by Professor Michael Barlow in University of Auckland, which is a bilingual or multilingual concordance, and it can be used in contrastive analysis, language learning, translation studies and training and so on.

Procedure of Experiment

The experiment starts in April, 2015 and ends in June, lasting 8 weeks. The experiment mainly includes two phases: preparation phase and implementation phase.

Preparation

Since the experiment will be conducted to compare and contrast the performance of subjects using different translations tools, the author should prepare two groups of subjects with equal translation competence translating the same materials with conventional dictionaries and parallel corpora.

Subjects translate materials chosen by the author in class or after class using traditional dictionaries, and then bring them back to discuss in class. The author asks some subjects to read out their translations, then makes comments on subjects' translations and finally the best translation is presented by the author to the class.

Before the experiment, the author would teach subjects about corpora, corpora analysis tools and extracting translationally-relevant information from corpora. At this stage, the author mainly chooses to teach subjects about parallel corpora and what parallel corpora have to offer to subjects. Then the subjects will translate the same materials using parallel corpora given by the author.

Implementation

Both subjects who use conventional dictionaries as translation tools in control group and subjects who translate with the help of parallel corpora in experimental group are required to finish eight pieces of Chinese-English translation materials as assignments, each of which consists of five Chinese sentences. The experiment is conducted in eight weeks, so the subjects finish the assignments once a week. Subjects in control group are required to finish the tasks by traditional way using dictionaries, while subjects in experimental group are required to use parallel corpora given by the author to finish the tasks. Finally, the author makes a conclusion about the experiment by comparing the translation versions from the subjects in control group and in experimental group. In the experiment, the author mainly compares the translations of words and phrases between control group and experiment group to see if parallel corpora can help subjects solve the problems of equivalence in the process of translation so that subjects can avoid typical mistakes and get more native translations.

Results and Analysis

In the experiment, the author finds that subjects in the experimental group show more resourcefulness in their translations and more freedom in their choice of words and expressions, which implies that parallel corpora may provide subjects with a wider range of potential translation equivalents, and it is easy for them to produce more natural and native target language expressions. Translating such phrase, subjects in the control group first get the meaning of each individual term, such as "independent", "thinking" and "ability" and then pile them together to form the expressions, such as "independent thinking ability" or "the ability of independent thinking" and so on. In this way, subjects are hard to get perfect translations and at the same time they can't be certain about whether their translations are acceptable or not. However, subjects who translate with the help of parallel corpora can get typical and well established translation equivalents, such as "critical thinking", "thinking for yourself" and "the ability to think for yourself" and so on. The difference in two groups' performance isn't due to the language ability. The main reason is that bilingual dictionaries of course also can offer a range of translation candidates for given words or terms, but it is up to subjects to assess if the translations are appropriate when just piling each individual word or term together, and the problem is that most of the subjects are not able to check if their translations are acceptable or not without enough context information, while parallel corpora can make up for the deficiency of conventional dictionaries and provide rich parallel samples for a word or phrase. So to some extent, parallel corpora provide useful supplement to the decontextualised translation equivalents provided in

dictionaries. To prove the impact of the parallel corpora, taking the Chinese word "kefu" as an example, subjects conventionally translate it into English word "overcome", but when tagging it into the corpora and then concordance displays that there are 24 Chinese sentences containing "kefu", in their translation sentences, there are 15 sentences, where "kefu" is translated as "overcome", another nine translations use other equivalents to meet different contexts, in contrast, when we search the word "overcome" in the English-Chinese literature corpora, the concordance shows that there are 18 sentences containing the word "overcome", but only three of them are translated as Chinese equivalent "kefu". So when subjects who translate with parallel corpora translate the word "kefu", they may find more proper equivalents from parallel samples provided by corpora except for "overcome", such as " surmount, cope with, conquer, prevail over, content with, fight down, get rid of, get out of, reduce, eliminate, correct and so on", which is well shown when asked to translate the sentence "ta yijing bijiao chenggong de kefu le zjiji yishi de kongju", among the subjects who translate with dictionaries, most of them translate "kefu" as "overcome", while stubjects who translate with the help of parallel corpora get some other words or phrases, such as, "get rid of her fear" or "conquer her fear" and so on. Next the author chooses two examples mentioned above to show parallel corpora can pretty well help subjects find proper equivalents.

Table 1 Translation of "duli sikao nengli"

"duli sikao nengli"	The experimental group (With corpora)		The control group (Without corpora)	
Acceptable Expressions	figure	percentage	figure	percentage
thinking for yourself	12	30	0	0
critical thinking	8	20	6	15
the ability to think for yourself	7	17.5	1	2.5
thinking independently	6	15	5	12.5
the ability of thinking independently	3	7.5	4	10
Total	36	90	16	40
Unacceptable Expressions	figure	percentage	figure	percentage
independent thinking ability	1	2.5	11	27.5
independent think	2	5	10	25
independent think ability	1	2.5	3	7.5
Total	4	10	24	60

The percentage of the data in Table 1 reveals that for the translation of "duli sikao nengli", in the experimental group, 90% subjects get acceptable translations and moreover in this group there are 30% of the subjects getting the native translation as " thinking for yourself" with the help of parallel corpora. However, in the control group, only 40% of the subjects get acceptable translations and no one get the native translation as "thinking for yourself". Most of subjects just pile each individual word together to form the expression regardless of the appropriateness of equivalents.

Table 2 indicates that the subjects in the control group mainly translate the phrase into "conquer the fear" (32.5%) and "overcome the fear" (47.5%), however the subjects in the experimental group get more appropriate equivalents with the help of parallel corpora, such as, "fight the fear down" (15%), "conquer the fear" (37.5%), "get rid of the fear" (17.5%) and "overcome the fear" (30%), which indicates that parallel corpora not only help subjects find equivalents in the target language but also offer more

translation choices for subjects to become more flexible in the process of translation, which is also helpful to improve their translation competence in the long term.

Table 2 Translation of "kefu kongju"

kefu kongju	The experimental group (With corpora)		The control group (Without corpora)	
Acceptable expressions	figure	percentage	figure	percentage
fight the fear down	6	15	0	0
conquer the fear	15	37.5	13	32.5
get rid of the fear	7	17.5	0	0
overcome the fear	12	30	19	47.5
Total	40	100	32	80
Unacceptable expressions	0		8	20

Findings and Conclusion

In the paper, the author elaborates on the experiment of the implications and applications of parallel corpora as translation tools for subjects to solve the practical problems in the process of translation. From the experiment, the author finds that parallel corpora can provide subjects well established equivalents so that subjects can solve the problem of choosing the proper equivalents and assessing the appropriateness of translation candidates in the target language. Parallel corpora have a significant value in dealing with the problem of finding the equivalents for the given terms. The translation of "duli sikao nengli" shows that parallel corpora can help subjects find appropriate equivalents for complex expressions; the translation of "kefu kongju" shows that parallel corpora can help subjects with producing translation with higher lexical diversity.

So it can be concluded that parallel corpora have significant value in dealing with the problem of finding the equivalents for the given terms. comparison of the subjects' translations of "duli sikao nengli" and "kefu kongju" between in the experimental group and in the control group shows that parallel corpora not only can help subjects find appropriate equivalents but also with parallel corpora subjects can translate out the sentences with higher lexical diversity.

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