

# The Effect of Corpus Translation Assistance on Translation Learning Outcomes

Xinyu Shi

School of Interpreting & Translation Studies, Guangdong University of Foreign Studies, Guangzhou, China  
Corresponding author: 20210602175@gdufs.edu.cn

## Abstract:

With the continuous development of society and the trend of economic globalization, mastering English translation skills is not only to fill the gap in social talents but also to meet the needs of one's development. At the same time, with the continuous development of translation technology, corpus plays an increasingly important role as a powerful auxiliary tool in translation learning. The purpose of this paper is to explore the impact of corpus translation assistance on the effect of translation learning, summarize the main contents of the previous research literature in the field of translation studies, and analyze and summarize the current research results, focusing on the research results of different experts and scholars. From the perspective of the impact of corpus on translation learning, previous studies have either focused on the impact of corpus on teaching methods in colleges and universities or students' learning of foreign languages. From the perspective of the impact of corpus on translation practice, some previous studies have focused on the help of corpus in a specific discipline or research field. Some studies have analyzed the corpus's establishment, development, and improvement in different professional fields. At the same time, this paper analyzes and looks forward to the specific research on the Collins corpus, which is relatively blank in the current research, and gives research suggestions at the end to provide some references for future research on the impact of corpus translation assistance on translation learning and translation practice effect.

**Keywords:** Corpus; translation; translation learning; impact; higher education.

## 1. Introduction

With the acceleration of globalization and the rapid development of information technology, the importance of translation skills in cross-cultural communication has become increasingly prominent [1]. However, several obstacles may influence translation learning and translation output, including the limited knowledge reserve of translators and the inability to translate professional terms in a timely manner. In addition, accurate manner during the translation process and the ambiguity in expressing multiple meanings of words are also influential factors.

As a powerful auxiliary tool, corpus provides many resources and examples for translation practice. The use of corpus for translation learning and translation output is conducive to further helping translators in terms of translation accuracy, language expression, and terminology mastery but also greatly improves translation efficiency and helps translators better carry out translation learning and output.

With the continuous development of translation technology,

various translation platforms and translation tools have increasingly entered everyone's field of vision, such as Baidu Translate, Google Translate, Bing Translate, DeepL, and other translation platforms, as well as common English corpora such as British National Corpus (BNC), American Contemporary English Corpus (COCA), American National Corpus (ANC) and other common English corpus are increasingly loved and used by translators.

As one of the three most famous corpus in the world, the Collins corpus has been gradually established under the guidance of Professor John Sinclair since the 80s of the 20th century. The search thesaurus has reached 450 million words, supports online search, and the Collins Dictionary edited and published based on this corpus has become an important reference dictionary in English translation learning and translation practice.

Based on the previous research results and literature, this paper focuses on the impact of corpus translation assistance on the translation learning effect. It summarizes the content of the relevant literature. In addition, the research

direction of Collins corpus as the main body is also put forward in the current research, hoping to provide some reference and help for the research in the field of corpus translation.

## 2. The Impact of the Use of Common English Corpus on the Learning and Practice of Translation

In the past translation research on the corpus, many scholars mostly used online monolingual (English) corpus to conduct research experiments and analysis, compared with the number of studies and analyses on constructing multilingual corpus. At the level of translation learning, some scholars pointed out that corpus-driven learning is conducive to improving students' vocabulary and grammar skills, as well as cultivating students' interest in learning and improving students' learning efficiency, while others have found that corpus resources are helpful for students' independent learning. Students can search for content an unlimited number of times, thereby improving their ability to solve translation problems and improve the quality of translation [2, 3].

Self-directed learning through online corpus can give students a deeper understanding of linguistic phenomena and cultural contexts and improve the accuracy and readability of their translated texts [4]. In terms of translation teaching, the translation corpus has great application advantages for university students who major in translation because its construction not only contains rich online translation resources and textbook translation content but also retains the records of students' translation practice every time, which can find students' knowledge weaknesses in the process of repeated application, and carry out targeted hierarchical and modular intensive exercises for them, focusing on breaking through the bottleneck in learning, which is very beneficial to efficient translation teaching and practice. It can be seen that the use of corpus for translation learning has indeed had a positive impact on translation students [5].

In addition, some scholars have also pointed out in research that corpus data show that vocabulary bias is the highest among all learner groups, regardless of the level of learners [6]. Indeed, the output of translation results in the translation practice of second language learners will be affected by various factors such as negative language transfer, the choice of translator's learning strategy, the length of time the translator has studied a language and the level of familiarity with the language. Still, it is precisely for this reason that using a common English corpus to assist translation learning and practice is more important.

This not only shows the importance of corpus use to translation learning and practice but also helps second language learners to avoid errors in the type, connotation, and communicative meaning of parts of speech to a certain extent to better improve the accuracy of translation and make the output of translated texts of higher quality. From this perspective, the impact of the General English Corpus on translation learning and practice is also positive.

## 3. Research on the Impact of Corpus in Different Professional Fields on Translation

In addition to the research experiments and analyses of online monolingual (English) corpus, it can also be found that many scholars have focused on the research and analysis of a specific field so far and have achieved certain research results and conclusions.

For example, in the field of poetry translation, combining the AdaBoost model and the ELM network, the author proposes the ELM-AdaBoost method, which puts the existing poetry translation corpus into the ELM network for learning and constructs a multimodal poetry translation corpus [7]. The multimodal translation corpus based on the AdaBoost model is a powerful tool for poetry translation research, which provides strong data support for Chinese poetry translation research and is of great significance to Chinese poetry culture.

In addition, some scholars have proposed the construction of a parallel translation corpus of Chinese folk songs. The researchers bridged this gap in the construction of translation corpus through a prospective study on creating the „Chinese-English Parallel Corpus of Flower Folk Songs in Northern Shaanxi“ (CEPCNSHFS). They conducted a pilot study to evaluate the practical utility of CEPCNSHFS [8].

Another example is in the field of biomedical engineering; the article „Research on English Translation of Biomedical Engineering Based on Computer-Aided Translation Technology“ uses SDL Trados Studio as a computer-aided translation technology platform to establish a translation practice-based English terminology database and corpus for biomedical engineering, and further explore the application and development of computer-aided translation technology in the field of biomedical engineering [9].

At the same time, the authors also point out in the article that English texts related to biomedical engineering are highly professional, rigorous, objective, and accurate, and the abbreviations appear frequently. For translators, on the one hand, because the translation machine can realize the

function of automatically matching the original content of the memory through computer assistance, it can prompt them to similar language methods in the translation process. On the other hand, due to the use of computer translation technology to assist translation practice, translators and proofreaders can better standardize and unify language expressions when checking the translated text to improve the review efficiency.

Establishing the corpus in different professional fields can further promote the development and construction of various professional fields and lay a foundation for cultivating interdisciplinary talents. It can be seen that the construction of corpus in different professional fields has positively impacted translation practice and has played a role in promoting the further development of translation practice.

### 4. Suggestions

In the previous research and experiments of various scholars, some achievements and progress have been made in the impact of a single English corpus on translation learning and practice and in the construction of translation corpus in various professional fields. However, there are still deficiencies in applying and analyzing a specific corpus at the broad translation level.

Therefore, future research on corpus as translation aids can focus on a corpus with high professional recognition and wide application scope, such as Collins, and analyze its role and impact on translation at various levels. This is conducive to further development of corpus translation research and provides good references and suggestions for translation learners and practitioners. In addition, future research can also focus on the impact of a specific corpus on translation in a certain professional field, which is not only conducive to the further development and construction of various professional fields but also can cultivate more scholars and interdisciplinary professionals with an international perspective for each professional field.

On the other hand, corpus construction still has a long way to go. How to build a corpus and translation platform with high accuracy, wide applicability, and high usage rate is an issue that needs to be addressed in the future. Promoting the construction of high-quality corpus and translation platforms cannot only vigorously promote the development of various translation practices but also promote the exchange of various professional fields and disciplines to a certain extent and realize the international development of scientific research achievements in various fields.

### 5. Conclusion

Corpus translation assistance profoundly impacts transla-

tion learning and practice, especially for English majors. The corpus provides a wealth of real-world contexts and examples to help students better understand the language's structure and semantics, thereby improving translation accuracy and fluency. Using corpus, students can be exposed to texts and contexts in different fields, broadening their knowledge and horizons. In addition, the corpus provides students with opportunities for self-directed learning and inquiry, developing their critical thinking and problem-solving skills. In terms of translation results, the establishment of various professional corpus can provide high-quality reference channels for the storage and query of professional terms and help improve the translation quality of professional content to better promote the continuous development of research content in professional fields in the direction of internationalization.

However, it should be noted that there are still deficiencies in the application and analysis of a specific corpus for a wide range of translations, and future research can focus on this scientific research gap to better help the establishment and improvement of a specific corpus and at the same time, it is also conducive to the widespread popularization and application of corpus translation technology. In addition, researchers should also note that although translation technology can provide many conveniences, it is necessary to truly internalize language knowledge into one's knowledge and improve translation skills. The judicious use of translation technology can bring benefits to translation learning. However, when the level of bilingual knowledge is insufficient, translation technology does not positively affect how translation is learned.

Corpus translation assistance positively impacts translation learning and translation practice and provides great help. The rational use of corpus cannot only greatly improve the quality and efficiency of translation but also help the development of scientific research achievements in various fields in the direction of internationalization. However, how to further focus on the research on the impact of specific corpus on the wide range of translations and better construct high-quality corpus is still a long way to go.

### References

- [1]Liu, X. Analysis on the application of parallel corpus in college English translation teaching. *Campus English*, 2018, 49: 43-44.
- [2]Li, Y. Research on English self-learning ability of college students driven by corpus: A case study of translation learning. *Journal of Mudanjiang Institute of Education*,2019, 2: 59-62.
- [3]Hu, L. & Wang, M. Research on improving college students'

- translation learning ability based on corpus resources: A case study of journalism major of Beijing Second Foreign Language Chinese University. *Journal of Gansu Radio and Television University*, 2021, 31(03): 69-72.
- [4]Wang, A. Application of online corpus in the self-directed learning of undergraduate translation students. *Tomorrow Fashion*, 2017, 16: 185-186.
- [5]Li, S. Construction of a multimodal poetry translation corpus based on AdaBoost model. *Applied Mathematics and Nonlinear Sciences*, 2024, 9(1).
- [6]Yang, W., Hu, N., Fu, F., et al. Research on English translation of biomedical engineering based on computer-aided translation technology. *China Educational Technology and Equipment*, 2024, 2: 14-16+25.
- [7]Yan, R. Research on the application strategy of translation corpus in the teaching of translation courses for English majors in colleges and universities. *Campus English*, 2021, 18: 31-32.
- [8]Lin, Y., Halim, A. H., & Jalis, M. M. F. Building a parallel corpus for Chinese folk songs translation studies: A case study of northern Shaanxi and Hua'er folk songs. *Theory and Practice in Language Studies*, 2024, 14(2): 454-468.
- [9]Zhang, J. A study on Chinese-English translation errors based on the translation corpus of intermediate and advanced English learners. Master's Thesis, Beijing University of Foreign Chinese, 2021.