

Association for Information Systems AIS Electronic Library (AISeL)

WHICEB 2016 Proceedings

Wuhan International Conference on e-Business

Summer 5-27-2016

Analysis of Corpus-based Translation Practice on CiteSpace-Supported Foreign Language Teaching

Xiaohui Wang

School of Humanities, Xi'an Polytechnic University, Xi'an, 710048, China

Juxia Gao

School of Humanities, Xi'an Polytechnic University, Xi'an, 710048, China

Follow this and additional works at: <http://aisel.aisnet.org/whiceb2016>

Recommended Citation

Wang, Xiaohui and Gao, Juxia, "Analysis of Corpus-based Translation Practice on CiteSpace-Supported Foreign Language Teaching" (2016). *WHICEB 2016 Proceedings*. 32.

<http://aisel.aisnet.org/whiceb2016/32>

This material is brought to you by the Wuhan International Conference on e-Business at AIS Electronic Library (AISeL). It has been accepted for inclusion in WHICEB 2016 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Analysis of Corpus-based Translation Practice on CiteSpace-Supported Foreign Language Teaching

Xiao hui Wang, Juxia Gao

School of Humanities, Xi'an Polytechnic University, Xi'an, 710048, China

Abstract: This paper reviews corpus-based multidisciplinary studies. The study covers hot inter-discipline areas, with emphasis on corpus-based translation studies. This paper explores the feasibility and efficacy of corpus-based studies that combine CiteSpace and business English teaching. We expect CiteSpace could better develop the function of methodology in designing the concept to the realization of the linguistic corpus, detecting academic frontiers and choosing research directions. The results show that corpus-based experiments have been carried out along major lines of research to realize the potential to turn isolated techniques into an integrative learning environment.

Keywords: CiteSpace Technology, Corpus-based study, multidisciplinary research, Knowledge Management, Business Correspondence

1. INTRODUCTION

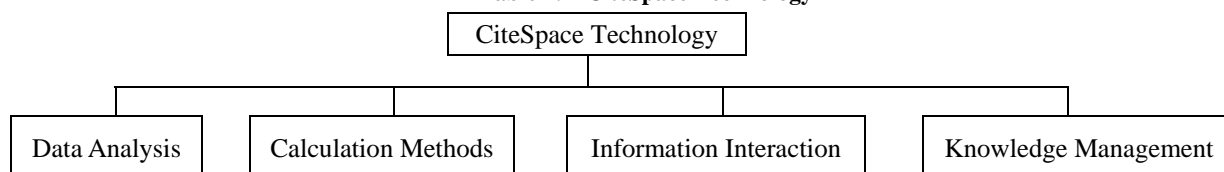
As we entered the global digital age and experienced the hotspots of knowledge management, we are able to work with modern technology to meet the demands of multimodal English teaching. The concept of mapping knowledge domains and the CiteSpace has got a lot of attention quickly since they have been introduced in domestic academia, and the relevant literature has spring up like mushroom in a variety of prestigious academic journals in diversified disciplines. CiteSpace enables analysts to perform quantitative and qualitative studies of scientific subject domains more easily. The study is to ensure that adequate knowledge mapping skills are being thoroughly taught. We analyze the impact factors of multi disciplinary study by using CiteSpace retrieval, and explore the measures for improving research on cross-curriculum study^[2]. The application of corpus-based CiteSpace technology allowed teachers and students to drill deeper into academic research and scientific application needs to develop the required expertise and design e-learning syllabus in different domain.^[3] It is helpful for the universities, the teachers and the students to share rich and excellent corpus resources summarized by CiteSpace. The study aims to improve students' cognition, establish effective knowledge management model and let the teachers experiment more comprehensively.

2. LITERATURE REVIEW

Thanks to the rapid development of computer technology, an increasing number of corpora have been designed and compiled for bilingual teaching purposes. Corpus-based e-learning belongs to the applied research field, the study of which has become an upward trend and been dominant by means of CiteSpace technology. The learner corpus research, bilingual corpus based studies have become more popular research field^[4]. The use of a corpus makes it possible for researchers to gather large amounts of authentic data and investigate features of translation on the basis of the observation and analysis of these data. There is continuous interest in ways in which the corpus-based approach can assist translation theory, enables the more thorough analysis and discovery of major features of translated language and is driving the development of automatic machine translation of various types. CiteSpace generated a co-citation network knowledge map for translation teaching research. Perception, corpus-based translation studies, drama translation and ethnicity are the hottest topics for discussions. The turning point is with high betweenness centrality, literature with citation bursts, key and hot

research topics, as well as the key and front research domains of world translation studies. More research papers are on the cluster, and the core researcher is about empirical translation research, the culture and sociological research, corpus-based evaluation approach, English progressive form, and school-of-poetic-and-semiotic. Citespace has a wide application in knowledge mapping and is quite complicated in selecting language features and corpus analysis, which create more technical barriers for the business English research. We can make full use of open Business English corpus 4 to search key words and instruments to learn more about business English texts to enhance learning.

Table 1. CiteSpace Technology



3. The BUILDING OF MONO-CORPUS TRANSLATION TEACHING MODEL

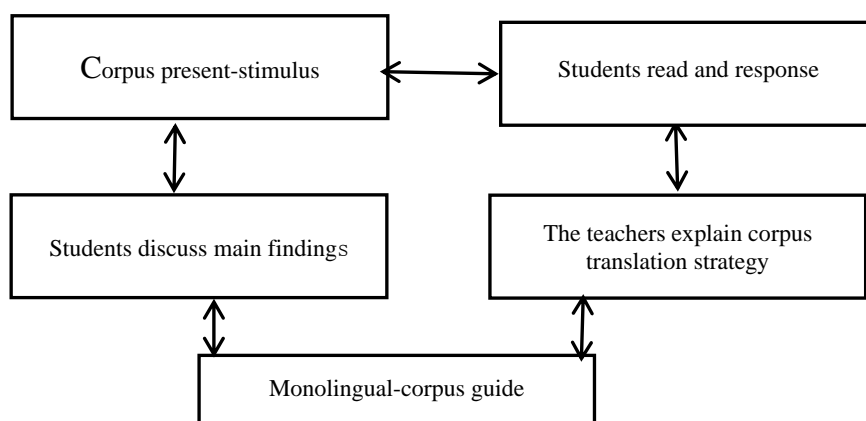
3.1 The feasibility of teaching research

The data is small. Most researches are based on limited articles, which have summarized the representation and applicability. The data quality is very limited. The isolation of target language and original language and the result is not widely applicable. Using mono-corpus, the teachers can instruct students to data-driven learning, find language features to avoid abstract teaching, to enhance the perception of micro language phenomenon.

3.2 The construction of corpus teaching model

Corpus translation helps to improve research shifting from prescriptive research to descriptive research, and know the nature of translation, is the integration, development of all traditional translation methods. Citespace has a wide application in knowledge mapping and is quite complicated in selecting language features and corpus analysis, which brings more technical barriers for the business English research. We can make full use of open Business English corpus 4 to search key words and instruments to learn more about business English texts to enhance learning^[4].

Table 2. the Application of Corpus in Translation Teaching



The monolingual corpus has instruments for translators to make comparison and experience authentic language, content and practice. The monolingual corpus has instruments for translators to make comparison and experience authentic language, content and practice. It covers product purchasing, publishing and receiving information, sales suggestions, procedures, technology, logistics, products, strategies and marketing. Data analysis helps to learn business terminologies, and key words in business environment, meaning explanation and the realization of company objectives. All these should be analyzed and examined in the classroom^[5].

Table 3 Teaching-centered Corpus Analysis(correspondence examples)

Teaching environment	Students grasp the skill of writing standard email
Communication purpose	Business communication in real environment
Readers	Business English major students and businessmen
Mini-corpus	13-page and 17 copies of Business letters, web resources
Research object	lexicon-grammar-discourse
Application in teaching	<p>Main exercises in translation teaching includes</p> <ol style="list-style-type: none"> 1.know the structure of business letter (its function automatic segmentation) 2.learn how to make the corpus annotation and part-of-speech tagging 3.grasp typical collocation(collocation analysis) 4.analysis of sentence groups in business letter: active,passive and tense 5. Business letter translation (C-E and E-C translation)

The statistic function of Corpus software has been used to analyze the advantages and disadvantages of students' translation work. More exercises will be assigned to enhance their learning results. The method has been used to realize a larger scale of bilingual data and perform contrastive discourse and interlingual comparison to obtain results more scientifically and representative. The corpus aims to analyze several hundred business vocabularies for the learners of different levels to use^[6]. Corpus-based method is able to improve students' translation theory acquisition and learn more translation-related features. Students will look through authentic business English corpus and improve business conversation practices^[7].

Table 4 Teaching-centered corpus analysis(correspondence examples)

Teaching environment	Students grasp the skill of writing standard email
Communication purpose	Business communication in real environment
Readers	Business English major students and businessmen
Mini-corpus	13-page and 17 copies of Business letters, web resources
Research object	lexicon-grammar-discourse
Application in teaching	<p>Main exercises in translation teaching includes</p> <ol style="list-style-type: none"> 1.know the structure of business letter (its function automatic segmentation) 2.learn how to make the corpus annotation and part-of-speech tagging 3.grasp typical collocation(collocation analysis) 4.analysis of sentence groups in business letter: active,passive and tense 5. Business letter translation(C-E and E-C translation)

The statistic function of Corpus software has been used to analyze the advantages and disadvantages of students' translation work. More exercises will be assigned to enhance their learning results. The method has been used to realize a larger scale of bilingual data and perform contrastive discourse and interlingual comparison to obtain results more scientifically and representative^[8]. The corpus aims to analyze several hundred business vocabularies for the learners of different levels to use. Corpus-based method is able to improve students' translation theory acquisition and learn more translation-related features^[9]. Students will look through authentic business English corpus and improve business conversation practices.

4. EXPERIMENT METHOD

4.1 Research corpus

Research Corpus can be subdivided into sub registers, such as logistic planning, sales, marketing, public relations, personal letters, customer service, response and letter of permissions, career planning(hiring and

recommendation),confirmation letter and supplier, letter of credits, company business and invitation. The business letters collection(of 10,000 words) was selected using a random method extraction from Hei Long Jiang University. The written language embodies the diversities of business communication. The research corpus has 12,000 words and the publishing time of those is from 2001to 2003.

4.2 Research instrument

Citespace has a wide application in knowledge mapping analysis,but in the language feature extraction,data analysis and other operations are more complex, which brings many technical obstacles to the general business English research.We can make full use of open Business English corpus 4 to search key words and instruments to learn more about business English texts to enhance learning^[10].

4.3 Research Method

Through contrasting different levels of Chinese English learners,we summarize the lexical and grammatical features of business letter of Chinese English learners by means of Corpus-base translation contrastive analysis method.

4.4 Research Purpose

Business English corpus aims to guide the students to search, observe, experience, find, collect and analyze different business English language use.search the key words, cocurrence and collocations to observe different sentence pattern use and the specific grammatical structure of the co-occurrence information.Students' enthusiasm to use corpus to solve concrete translation problems has been aroused to summarize the corpus, analyze the semantics and get the final result.the rich materials in mono-corpus can be used for students to practice their skills and question the authority to stimulate students' creativity and imagination.

Table 5 The analysis of Corpus annotation

Original language	Translation	Language feature	Translation methods
我已经看了所有你给的数量和目标价，我需要跟我们生产上再仔细核算一下。	I reviewed all the quantity and the target prices; I need to double check with our production department.	<LF:n-p>	<TT:omission,>
对于下表中您列的各款需要每款一只样品的，我会尽快安排请并尽量在下周告诉你样品的进度。	Please advise all the items you list below, only 1 piece each are needed.	<LF:passive>	<TT:division omission, >
但你的目标价看起来太低了。我会尽力给你再争取一个具有竞争力的价格并请告知 W2493 这款你大概需要多少数量？	Anyway I will try my best to work competitive prices and will get back to you as soon as possible. For W2493, please advise the quantity you'd like to order.	<LF:front-weight>	<TT:omission>

The monolingual corpus has instruments for translators to make comparison and experience authentic language,content and practice.it covers product purchasing,publishing and receiving information, sales suggestions,procedures,technology,logistics, products, strategies and marketing.data analysis helps to learn business terminologies,and key words in business environment,meaning explanation and the realization of company objectives^[11]. All these should be analyzed and examined^[11] in the classroom.

5. RESULTS AND DISCUSSIONS

The corpus and computer-aided translation tool have been introduced to the classroom teaching to improve translation teaching and learning.the research indicates that the new teaching model helps to train students' translation skills,improve their awareness and translation ability. It supports the development of corpus

software tools and the compilation of the data. Translation accuracy and efficiency have been improved by using mono-corpus. Chinese translation text presents a concise trend. The simplified translation version has an influence on the process. The differences of learners' translation are mainly reflected in the collocation, and there are some differences in verb types, the clause types and the dimensions of the analysis.

Table 6 The ten biggest differences between Business English and general English

Features	Business English	General English	P-value	Absolute difference value
TTR(Type-token Ratio)	-4.42	0.82	.000	5.24
Second person pronoun	2.16	-0.28	.000	2.44
Expected modality	1.63	0.04	.000	1.59
infinitive	1.69	0.22	.000	1.47
third person pronoun	-1.08	0.08	.000	1.16
That guide relative clause(the subject in the subordinate clause)	1.02	2.11	.000	1.09
first person pronoun	0.67	-0.35	.000	1.02
Past tense	-0.84	0.13	.000	0.97
Past participle phrase	1.07	1.98	.000	0.91
Coordinate phrase	1.36	2.19	.000	0.83

Some drawbacks exist regarding monolingual corpus: More focus on its explicit, simple, normalization and implicit translation features. Less about macro translation features. Compared with other integrated corpus, the existing business English corpus deal with data relatively coarse. Apart from CANBEC, other popularly used corpus have not done the post finishing of the corpus (including alignment, annotation and headers). Furthermore, these corpus often have relatively single use, are designed for business English teaching, which lack of deep exploration on structure, rhetoric and consideration of translation teaching and practice^[12].

6. CONCLUSION

Apart from CiteSpace, more instruments, methods and reference techniques will be developed to handle information fast and accurately to improve the prosperity and development of academic exploration. It is by creating a nurturing and learning-by-doing kind of teaching environment that, a university can sustain its competitive advantages to enrich learning and empower teaching. Teachers must take advantage of new retrieval technology in accordance with digital era to improve curriculum delivery, enhance cross-subject and multi-disciplinary data management skills, to extend the pedagogical use of CiteSpace technology to connect virtual and real objects, to support a continuous, contextual and meaningful learning to improve the qualitative basis and visualization of implicit knowledge. We expect CiteSpace could better develop the function of methodology in designing the concept to the realization of the corpus-based translation studies, detecting academic frontiers and choosing research directions.

ACKNOWLEDGEMENT

The author would like to professor Gao juxia and professor Li Yan, for their patient guidance and valuable comments. The authors would like to express their gratitude to the teachers in the FLTRP research team who have provided online academic exchange forum for us. This research is part of the two-year project "selective course" (2014–2016), which was funded by the Teaching Research Fund of the Xi'an Polytechnic university (No. 2014JG034).

REFERENCES

- [1] ZHAN Chuan. Knowledge Mapping Analysis of Research on Big Data.
- [2] Wang Li fei, li Lin (2014). CiteSpace-Based on visualization technology of foreign business English research progress. 2002-2012. 88-96. Chinese Foreign Languages.
- [3] Hu, K. (2016). Corpus-Based Study of Features of Translation. *Introducing Corpus-based Translation Studies*. Springer Berlin Heidelberg. 85-118.
- [4] †, S. T. G. (2009). What is corpus linguistics?. *Language & Linguistics Compass*, 3(5), 1225-1241.
- [5] Hüttner, J., Smit, U., & Mehlmauer-Larcher, B. (2009). Esp teacher education at the interface of theory and practice: introducing a model of mediated corpus-based genre analysis. *System*, 37(1), 99-109
- [6] Éva Viola. (2013). *Jeremy Munday Introducing Translation Studies: Theories and Applications: Abingdon and New York: Routledge*, 2012, (3rd edition) 364 pp. isbn: 978-0-415-58489-0. *Across Languages & Cultures*, 14(1), 155-159.
- [7] O'Keeffe, A., & McCarthy, M. (2010). *The Routledge Handbook of Corpus Linguistics*. *Routledge Handbooks in Applied Linguistics*, 34(1), 113-115.
- [8] Bowker, L., & Pearson, J. (2002). *Working with specialized language : a practical guide to using corpora*. Routledge.
- [9] Chen Yue, Chen Chao mei, Liu Ze Yuan, Hu Zhi gang, & Wang Xian wen. (2015). The methodology of CiteSpace knowledge mapping [J]. *Study of Scientiology*, 33(2), 242-253.
- [10] Gong Hao chen. (2015). A Review of Corpus Translation Studies in China in recent fifteen Years-CiteSpace III-based Visual Analysis [J]. *Journal of Jilin TV and Radio University* (7), 54-55.
- [11] Feng Jia, Wang ke fei, & Liu Xia. (2014). Scientific Knowledge Map International Translation Studies Dynamic Spectrum Analysis in recent twenty years [J]. *Media In Foreign Language Instruction*(1), 11-20.
- [12] Liu Xia, Xu Jia jin, & Liu Lei. (2014). An Overview of the Research on the Corpus Linguistics in China based on CiteSpace (1998-2013) [J]. *Corpus Linguistics* (1).