A Corpus-driven Contrastive Study on Reporting Verbs in Research Articles

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The use of reporting verbs is a common way in the collaborative construction of new knowledge by academic writers and readers. Most researches that concerns reporting verbs are limited to mono-lingual studies. Contrastive Phraseology is a newly emerging subfield of Contrastive Linguistics from the perspective of Phraseology, which aims at comparing the multi-lingual phrases in form, meaning and function. This research analyzed the Chinese equivalents of English reporting verbs aided by the comparable corpora. It is found that there is no equivalence of Chinese and English reporting verbs in research articles, and evaluative reporting verbs is more frequently used in English research articles. This study fundamentally shed light on the contrastive study of reporting verb phrases cross language.

Keywords: academic writing, reporting verbs, comparable corpora, translation equivalents, contrastive phraseology

Introduction

Based on a view of writing as a social and communicative engagement between writers and readers, a large number of researches focused on how academic writers achieve effective interaction with the readers while maintaining the integrity of their data and expressing their attitude (Hyland, 1999). Hedges (Hyland, 1996), reporting conventions (Hyland, 2000; Thomas & Hawes, 1994), evaluation (Hunston, 1993; Thompson & Ye, 1991) and self-mention (Hyland, 2001) are among the features that have been examined for the ways such writer-reader interactions are realized in journal articles.

With the development of comparable corpus and contrastive phraseology, many studies of the aforementioned interactive strategies have been conducted to the cross-linguistic comparison under the framework of the contrastive phraseology, including meta-discourse (Mu et al., 2015), hedging (Hu & Cao, 2011; Yang, 2013), authorial stance markers (Wu, 2010), and self-mention (Wu, 2010). However, the study of reporting verb is still limited to the mono-lingual research. To be more specific, most of the studies compared the use of native and non-native writers, focusing on the master of English language learners (Lou, 2011, 2013; Zhang, 2012). Few studies have made comparisons at a phrasal level. Therefore, within the framework of...
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contrastive phraseology, this paper aims to explore reporting verb phrases concerning their form, meaning and function in English journal articles and tries to identify their Chinese equivalence in order to shed light on the English-Chinese contrastive study on reporting verbs.

**Reporting Verb**

Reporting verb is defined as reporting marks that convey relevant academic information (Thomas & Hawes, 1994). Swales maintained that reporting verb is employed by academic writers who rely on the previous research to state facts and clarify their own research views, and the proper use of reporting verb can help enhance the persuasiveness of the writers’ argument (Swales, 1990).

Thompson and Ye (1991) firstly categorized reporting verb into denotation verb and evaluation verb. Based on this categorization, Hyland gave a more comprehensive one to provide a clearer boundary concerning the attitudinal stance embraced in reporting verb (see Figure 1, Hyland, 1999). This study will refer to the second categorization given by Hyland.

| 表意动词 (denotation) | 研究性转述行为 (Research Acts) | 表示结果的转述动词 (Findings) | observe, discover, notice, show |
| 认知性转述动词 (Cognition Acts) | 表示研究过程的转述动词 (Process Acts) | analyze, calculate, assess, explore |
| 评价性动词 (Evaluation) | 被转述者立场是积极的 (author positive) | advocate, argue, hold, see |
| 非叙述性 (Non-Factive) | 被转述者立场是中性的 (author neutral) | address, cite, comment, look at |
| 被转述者立场是不确定的 (author tentative) | allude to, believe, hypothesize, suggest |
| 被转述者立场是批判性的 (author critical) | attack, condemn, object, refute, claim, oppose |
| 反叙述性 (Counter-factive) | fail, overlook, exaggerate, ignore |

**Figure 1.** Categorization of reporting verb.

**Contrastive Phraseology**

Phraseology has been established as a separate discipline in linguistics (Wei, 2011). The corpus-based study of phraseology mainly focuses on the collocational behavior of phrases, especially on form, meaning and function (Lu & Wei, 2014). Sinclair argued that much of what appears in spoken or written texts follows what he calls the idiom principle, that is, each word in the text is used in a common phraseology, meaning is attached to the whole phrase rather than to the individual parts of it, the hearer or reader understands the phrase as a part of it, and the hearer or reader understands the phrase as a phrase rather than as a grammatical template with lexical items in it (Sinclair, 1991). According to Sinclair, the extended units of meaning consists of five elements, core, semantic prosody, semantic preference, collocation and colligation, among which semantic prosody weighs the most by expressing the writers’ attitude in a specific context. These two basic concepts, idiom principle and the extended units of meaning are the principal theoretical framework in corpus-based study of phraseology.
Contrastive Phraseology integrates corpus linguistics, phraseology, contrastive linguistics, translation studies and other disciplines, which aims to examine the similarities and differences of the collocational behavior of words or phrases cross languages, especially the comparison and equivalence of the phrases in terms of the form, meaning and function. (Wei, 2011) Since it is the newly emerging sub-direction of phraseology, it shares the classical theories in phraseology: idiom principle; extended unit of meaning and co-selection (Sinclair, 1991).

Methodology

Corpus

Aiming at exploring the Chinese equivalence of English reporting verb phrases, this research adopts both quantitative and qualitative research methods and the data are collected from the Corpora of Chinese-English Academic Papers (CCEAP) (Zhang, 2021), comprising 800 articles in English and Chinese journals in both hard and soft sciences. The English journal articles are extracted from SCIEX, SSCI, and A&HCI databases, while the Chinese articles are from Chinese Core Journal database, most of which are written by native English and Chinese scholars. Most contrastive studies on reporting verbs focused on linguistics discipline (Lou, 2011, 2013; Zhang, 2012); therefore, this paper also selects 20 articles in linguistics disciplines from CCEAP, a total of 40 articles to form a sub-corpus of English and Chinese linguistics disciplines.

Research Procedure

According to Charles’s (2006) research framework, the first step is to search that in CCEAP-E, and obtain three most frequent and significant reporting verbs that co-occur with that (T value>2): (1) Search these three reporting verbs in CCEAP-E respectively and their patterns and analyze their specific functions based on Hyland’s analysis framework (Hyland, 1999); (2) Refer to the online-dictionary to get the Chinese translation of the phrases; (3) Search the Chinese translation of the reporting verb phrases in CCEAP-C; and (4) analyze their meaning and functions and identify the translation equivalence.

Results

It is found that the most significant collocational reporting verb with that in CCEAP-E is suggest (T=2.86), argue (T=2.58) and show (T=2.46). The most frequent collocational type showed in concordance line is X(suggest/argue/show) + V(verb)+ that followed by It is /was/has been+ V-ed + that and as V-ed by. This section mainly focuses on these three verbs in comparable corpora to find out their Chinese equivalents.

Translation Equivalence: The Collocation of Single Words

It turns out that as a reporting verb, suggest in the reporting pattern also co-occurs with expressions of relatively the opposite meaning.

Example (1) is a case in point.

Quirk et al. (1985, p. 590) found very to be the most frequent intensifier in contemporary British English, while Labov (1984, p. 44) suggested that really was one of most frequently used intensifiers in North America, an observation that was later confirmed quantitatively by Rickford et al. (2007, p. 9) and Tagliamonte (2008, p. 367).
According to Hyland (1999), suggest belongs to the evaluative reporting verb, and he noticed that many of the English academic writers tend to use suggest pattern in the context where he/she first disagrees with the previous research results and then use suggest pattern to introduce other results that conforms to his/her academic idea, increasing the authority and reliability of his/her article. The function of the suggest pattern is more like the use of while/however, I believe… in self-mention (Hyland, 2001).

Generally, argue often co-occurs with words conveying the meaning of moreover, and in order to provide explanation and evidence for their argument. For example:

Example (2)

… whether it proves to be too narrow in the light of computer-mediated communication, as was argued by Durscheid (2016), who applies the term interaction to situations …

Similar to suggest, argue also belongs to the evaluative reporting verb, and is most frequently used in the situation where the writer holds the same point with the cited writer (Hyland, 1999). Similar with the findings given by Hyland, the present study also shows that argue is used to highlight some influential previous literature to complement the writer’s point to enhance the authority of his or her paper. The function of this argue pattern is more like the use of …hold/advocate that when providing evidence in research articles.

Show is always employed to evince a procedure or result of a research. Generally, the academic writers prefer directly using showed to present the findings, without co-occurring with other attitudinal words. For example:

Example (3)

The Toronto study by Tagliamonte (2008) showed that intensifiers very, pretty, and really, were used differently in attributive and predicative contexts depending on the age of the speaker.

“Show” is always used in pattern X verb. One explanation might be that when presenting the results or findings of the previous study, making the authoritative scholar be the subject of reporting structure can downplay the personal judgement of the writer to highlight the objectivity. Therefore, show belongs to the denotative reporting verb, being consistent with the classification given by Hyland (1999). Functionally, the show pattern is similar to “this result presents…” in result part of a paper, both of which is objective presentation of the result of research.

The Chinese meanings or translations of suggest, argue and show related to reporting in three authoritative dictionary Oxford Advanced Learner’s Dictionary (9th audition), Collins Cobuild Advanced Learner’s English-Chinese Dictionary and Longman Dictionary of Contemporary English are as follows: (1) Suggest: 认为, 表明, 暗示 (Oxford); 认为是, 暗示 (Collins); 提议, 显出 (Longman); (2) argue: 论证, 证明, 表明 (Oxford); 陈述理由 (Collins); 辩论, 论证 (Longman); (3) show: 表明, 证明 (Oxford); 显示, 表明 (Collins); 证明, 说明, 解释 (Longman).

Seen individually, suggest, argue and show have stable, well-accepted Chinese translations or corresponding words in at least two dictionaries (see the underlined). However, when we take collocation into consideration, these corresponding words are not always exactly equivalent to the reporting meaning in English. First, the Chinese corresponding word of suggest is “认为”, which is basically used in reporting behavior, but it does not co-occur with the words expressing the opposite meaning. Therefore, “认为” is not exactly equivalent
to suggest. Second, “论证” occurs ten times in CCEAP-C, among which only one instance is used in the reporting structure. Therefore, it is not semantically and functionally equivalent to argue in this pattern. Third, both “表明” and “证明” are used with “该研究结果”， which does not belong to reporting behavior. The more frequently occurring reporting verbs in Chinese are 指出 (85 occurrences in CCEAP-C and are all used for reporting) and 提出 (88 occurrences in CCEAP-C and 90% are used for reporting). Words like “指出”， “认为” often occur with non-attitudinal words while “提出” is mostly used to evince theory to augment the persuasiveness of the article, which is functionally similar to argue in reporting structure.

**Translation Equivalence: The Collocation of Phrase**

The context of phraseology mainly refers to four or five words left or right to the core, which sometimes may expand to the neighboring sentence or paragraph. Therefore, it is necessary to focus on the reporting verb phrases in a larger collocational concordance to check their equivalents.

Two larger collocation of reporting verb phrases are It is/was/has been + V-ed + that and As +V-ed + by. The collocation of suggest, argue and show in single words has been discussed before. We search the whole pattern of the three reporting verbs through online translation website http://www.youdao.com to get their parallel sentences and retrieve these sentences in CCEAP-C to check whether the Chinese translation is equivalent to the original sentence in CCEAP-E.

First, it is shown that in the 27 parallel sentences of it is suggested that, the Chinese translations include “据建议”, “有人建议”, “这表明”, “结果表明”. When we examine these phrases in CCEAP-C, it turns out that only one instance is used to report the previous work; while others are all used to present the writer’s own research results. In terms of the pattern “as suggested by”, the meanings of their Chinese parallel sentences include “正如……建议”, “如……所示”, “按照……所建议的”, all of which are not found in CCEAP-C. Actually, the pattern “正如…” is used in reporting behavior in Chinese research articles but it occurs more in the following pattern: “正如……所说”, “正如……提出”, “正如……指出”. Therefore, it can be concluded that the collocation of suggest phrase is not equivalent in this comparable corpus.

Second, in most cases, it is argued that is not translated by phrases but single word, such as “……认为”, “……主张”, which have been analyzed before. Then we search as argued by, it is shown that there is only on parallel which is not used in reporting behavior. This phenomenon occurs because in this expression, as argued by is often used in academic texts while most cases in the translation website are general English. Therefore, it can be concluded that the collocation of argue phrase is not equivalent in this comparable corpus.

Last, in the 25 parallel sentences of it is shown that, the Chinese translations are mostly “研究表明”, “结果表明”, “实验表明”. After searching them in CCEAP-C, “it turns out that”, result of similar to “It is suggested that”, these phrases are also used to present the the writer’s own research results, that is self-reporting. “研究表明” is used in reporting behavior only once. Then we got 30 parallel sentences of as shown by, among which the most frequently occurring is “如…所示”. Searching “如..所示” in CCEAP-C, we notice that it occurs in the pattern “如图/表所示” to illustrate the information of figure or chart provided. Therefore, it can be concluded that the collocation of show phrase is not equivalent in this comparable corpus.

After analyzing the single word, and the phrase patterns of suggest, argue and show in original English corpus, in translation version and in Chinese corpus, it is found that all of their collocations are not equivalent
in meaning and function. The collocational behavior of reporting phrase in English is flexible and various while in Chinese, “正如……所说”, “正如……提出”, “正如……指出” are more used in reporting behavior without any changes in pattern.

Discussion

We may get two implications from our research findings. First, in terms of the use of reporting verb, Chinese reporting verb is relatively simpler that the word itself is used to present an objective fact, without holding any evaluative function. They mainly directly use additional words such as “正如…” “与…不同” to express their attitude. On the contrary, the use of reporting verb or phrase pattern is much more complicated in English academic writings. For example, when using suggest, the writer often uses it to indicate the similar point with previous study. This difference contributes to explanation of the misuse of reporting verb in Chinese learners’ English academic writing that the writing pattern of Chinese papers has a negative transfer in English writing. Second, from the perspective of English-Chinese equivalence in contrastive phraseology, what provided in the bilingual dictionary is more like a meaning reference rather than translation reference. In some specific context, the translation of a single word or phrase pattern is required to take the whole semantical and functional influence into it.

Conclusion

This study discussed the translation equivalence of single reporting verb suggest, argue, show and their phrase pattern in comparable corpus CCEAP. The findings show that none of them are equivalent between English and Chinese version, and English reporting verbs embrace much more evaluative meaning than Chinese reporting verbs. This difference help illustrate the ultimate reason for the misuse of reporting verb in English articles written by Chinses writers. Theoretically, the combination of corpus and contrastive phraseology provide a new perspective for the contrastive study of reporting verb and its translation. Practically, this study inspires the English writing teaching and translation practice, that English teachers can recommend students read more original English articles to raise students’ awareness to the different use of reporting verb in different language, only in this way, can student perform better in English writing and translation practice.

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