

A Comparative Study of Stance Adverbs Used in the Introduction Section of Chinese and English Native Scholars' Journal Articles

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Abstract

The research aims to examine stance adverbs in the introduction section of Chinese and English native scholars' journal articles. The corpus-based analysis reveals that Chinese and English native scholars use epistemic stance adverbs most frequently, attitudinal stance adverbs next, and style-of-speaking adverbs last, and that Chinese scholars use lower frequency and variety of stance adverbs than their native counterparts. It is also found that the frequency of the collocates mainly used by Chinese scholars is dramatically higher than that of English native scholars. It also indicates that Chinese scholars can reasonably use attitudinal stance adverbs frequently used by English native scholars, but their awareness of using attitudinal adverbs still needs to be improved. English native scholars are more inclined to put stance adverbs in the sentence-medial. Furthermore, both Chinese and English native scholars tend to use epistemic and style-of-speaking stance adverbs in the sentence-medial position, and they are more likely to place attitudinal stance adverbs in the sentence-initial and medial position.

Keywords

Journal Article; Introduction Section; Stance Adverbs.

1. Introduction

It is traditionally believed that the purpose of academic writing lies in expressing the research content and conveying information objectively and neutrally instead of mixing authors' personal feelings and attitudes. In recent years, however, a consensus has been reached that academic writing should be viewed as evaluative and interpersonal rather than simply informational and objective, with writers not only just presenting their findings in an objective way, but evaluating, critiquing them and building solidarity with readers (Hyland & Tse, 2005). The stance adverbs as one way to help authors to realize their personal attitude and evaluation of position thus have attracted a great amount of research attention.

Meanwhile, Introduction section, as the opening paragraph of academic articles, plays a role of leading readers to understand the detailed information of the subsequent part of the paper and providing interpretation perspective (Swales, 2004). The accurate use of stance adverbs in the introduction section is helpful for the author to convey the determination of the research field, the gaps in the research field and the filling of the gaps in the research field to the readers in a more fair and objective way. Under such circumstances, this study explores the systematic differences between Chinese and English native scholars in the use of stance adverbs in the introduction section of journal articles, so as to help Chinese scholars face up to the shortcomings and improve the accuracy of language production.

2. Research Design

2.1. Research Questions

This research is conducted quantitatively and qualitatively to address the following three research questions.

- 1) What are the similarities and differences in the frequency distribution of stance adverbs used by Chinese and English native scholars?
- 2) What are the preferences of Chinese and English native scholars in the collocation sequence of stance adverbs? What account for these preferences?
- 3) What are the similarities and differences between Chinese and English native scholars in the position distribution of stance adverbs?

2.2. Data Collection

All the research articles were collected from Chinese Journal of Applied Linguistics and Applied Linguistics. The reason why Applied Linguistics is chosen lies in that its impact factor reaches 5.741, and its five-year impact factor is 5.374, ranking top 1 out of 193 linguistics journals, which means the samples selected fulfill the criteria of representativity and authoritativeness for data collection. The reason for choosing Chinese Journal of Applied Linguistics is that Chinese Journal of Applied Linguistics is the only academic journal for foreign language teaching research published in English in China. Considering the background of the author of the article, this study carefully reviewed the author's name characteristics, country, institution, etc. to ensure that the authors of the selected 140 articles from Chinese Journal of Applied Linguistics can represent Chinese scholars, and the authors of the other 140 articles from Applied Linguistics represent English native scholars. All the articles selected were published during the period from 2010 to 2021, with only the introduction sections extracted to build two corpora, i.e., Chinese Journal of Applied Linguistics Corpus (CJALC) and Applied Linguistics Corpus (ALC). CJALC contains a total of 675,045 tokens and ALC 461,640.

2.3. Research Procedures

Firstly, AntConc 3.2.1 (Windows) was employed to retrieve stance adverbs in CJALC and ALC according to the theoretical framework put forward by Xu (2007), which classifies stance adverbs into the following three categories: epistemic stance adverbs, attitudinal stance adverbs, style-of-speaking adverbs. The raw frequency and normalized frequency of the retrieved stance adverbs in CJALC and ALC were calculated.

Secondly, Chi-square test was conducted to find out whether there exist significant differences in the distribution of stance adverbs between CJALC and ALC. Moreover, the overuse and underuse of stance adverbs were investigated. Specifically, LLX2-Chi-square and Log-likelihood Calculator is the tool employed for Chi-square test.

Finally, AntConc was used to retrieve the positions of stance adverbs in CJALC and ALC, combined with chi square test to analyze the differences between Chinese and English native scholars in the use of stance adverbs, and make a qualitative analysis of the differences.

3. Results and Discussion

3.1. Comparative Analysis on the Frequency of Stance Adverbs between CJALC and ALC

Altogether, 127 stance adverbs are retrieved from the two corpora, and 85 stance adverbs are found in CJALC Corpus, and 105 stance adverbs are found in ALC Corpus, among which 74 are shared by the two corpora. Due to the difference in the size of the two corpora, it is necessary to calculate the normalized frequency of stance adverbs. According to statistics, the total

frequencies of stance adverbs used in CJALC and ALC are 482 and 850, and the normalized frequencies are 0.714 and 1.842 respectively.

Table 1. Overall frequency of stance adverbs in two corpora

Corpus	Tokens	Total frequencies	Normalized per 1000 words	Chi-square	P
CJALC	675045	482	0.714	-208.100	0.000
ALC	461640	850	1.842		

As for how the frequency of subcategories of stance adverbs in CJALC and ALC differs, the detailed information is given in Table 2. the frequency of epistemic adverbs among the three categories of stance adverbs is the highest in CJALC and ALC, and its normalized frequency is 0.594 and 1.389 in CJALC and ALC respectively (per 1000 tokens). The second highest frequency of adverb is the attitudinal stance adverbs, which has normalized frequency of 0.070 and 0.245 per 1000 tokens in the two corpora separately. Style-of-speaking adverbs are of the lowest frequency, and its normalized frequency in the two corpora is 0.050 and 0.208 (per 1000 tokens). Compared with English native scholars, Chinese scholars use fewer categories of stance adverbs. Meanwhile, the number of stance adverbs used by Chinese scholars is not as large as that used by English native scholars, which may be caused by the fact that Chinese scholars are not good at or repeat some stance adverbs. And Chinese scholars lack diversity or accuracy in expressing stance.

Furthermore, the frequency of the three kinds of stance adverbs used by Chinese scholars is significantly lower than that of English native scholars. Finally, the normalized frequency per 1000 tokens of stance adverbs used by Chinese scholars is lower than that of English native scholars, and there is a significant difference ($p=.000 < .05$). These findings coincide with the research of Pan (2012), which makes a comparative investigation on the usage characteristics and pragmatic differences of stance adverbs in Chinese and international English journal articles.

Table 2. Frequency of categories in CJALC and ALC

Category	Raw frequency		Normalized frequency		Chi-square	P
	CJALC	ALC	CJALC	ALC		
Epistemic	401	641	0.594	1.389	-188.083	0.000
Attitudinal	47	113	0.070	0.245	-58.523	0.000
Style-of-speaking	34	96	0.050	0.208	-58.167	0.000

The main reason why Chinese scholars use too many epistemic stance adverbs is that they use a certain type of stance adverbs more than English native scholars, resulting in significant differences in epistemic stance adverbs on the whole (Chen & Zhang, 2010). In order to reveal the specific differences of the three types of stance adverbs in the use of each subcategory of

stance adverbs in the two corpora, a comparative analysis is made on the subcategory of stance adverbs. The specific information about the subcategories of stance adverbs in CJALC and ALC is shown below in Table 3.

Table 3. Frequency of subcategories in both corpora

Category	Subcategory	Normalized frequency		Chi-square	P
		CJALC	ALC		
Epistemic	often	31	83	-47.669	0.000
	mainly	28	6	6.514	0.000
	largely	12	26	-11.058	0.000
Attitudinal	typically	6	28	-22.861	0.000
Style-of speaking	simply	6	15	-7.040	0.008
	specifically	17	41	-20.526	0.000

Furthermore, the top ten frequency stance adverbs and the specific information are presented in the following Table 4. It is shown that both Chinese and English native scholars use the following seven stance adverbs, namely: usually, highly, largely, often, widely, relatively, and specifically. However, the rank of the high frequency distribution of these stance adverbs in the two corpora is different except often. The other three stance adverbs are mainly, primarily and generally in CJALC, and typically, potentially and frequently in ALC separately. Among the 10 high frequency stance adverbs in CJALC and ALC Corpus, 7 of them are consistent, which indicates that Chinese scholars can use the stance adverbs frequently used by English native scholars.

Table 4. Top 10 stance adverbs in two corpora

CJALC				ALC			
Rank	Stance adverbs	Frequency	Normalized frequency	Rank	Stance adverbs	Frequency	Normalized frequency
1	often	31	0.046	1	often	83	0.180
2	widely	29	0.043	2	specifically	41	0.089
3	mainly	28	0.041	3	widely	28	0.061
4	usually	20	0.030	4	typically	28	0.061
5	generally	18	0.027	5	largely	26	0.056
6	specifically	17	0.025	6	potentially	25	0.054
7	primarily	15	0.022	7	highly	24	0.052
8	relatively	13	0.019	8	frequently	24	0.052
9	largely	12	0.018	9	relatively	23	0.050
10	highly	11	0.016	10	usually	19	0.041

Through semantic analysis, it is found that the top 10 frequency stance adverbs have the following three meanings: indefinite frequency (often, usually, generally), indefinite degree (widely, mainly, primarily, relatively, largely, highly), and style-of-speaking (specifically) in Corpus CJALC, while they have four meanings: indefinite frequency (often, potentially, frequently, usually), indefinite degree (relatively, largely, widely, highly), style-of-speaking (specifically), and evaluation (typically) in Corpus ALC. The above results indicate that Chinese scholars can use stance adverbs frequently used by English native scholars, but there are not as many types of stance adverbs as English native scholars. Meanwhile, Pan (2012) concludes that compared with English native scholars, the variety and number of stance adverbs used by Chinese scholars are significantly less.

3.2. Comparative Analysis on Collocation Sequence of Stance Adverbs Between CJALC and ALC

It is impossible to exhaust the analysis on the collocation sequence of all the adverbs, and thus, we select mainly, typically, and specifically to represent epistemic stance adverbs, attitudinal stance adverbs and finally style-of-speaking adverbs respectively. The three stance adverbs selected are quite representative because they are all top ten frequency words in the two corpora, and moreover, chi-square test results of these three stance adverbs are 6.514, -22.861 and -20.526 respectively, and the p-values of them are 0.000 less than 0.05, indicating that these three stance adverbs are significantly different and comparable in the two corpora.

The results indicate that the collocates mainly are overused by Chinese scholars. In addition, the preferred collocation of mainly has the most dramatically difference in CJALC Corpus and ALC Corpus, and Chinese scholars have great preference to use be mainly + v-ed, while English native scholars are more likely to use v. + mainly + prep, and aux. + mainly + v-ed. Furthermore, six indefinite degree adverbs (mainly, primarily, widely, largely, highly, relatively) are frequently used by Chinese scholars, among which the former two (mainly, primarily) are not frequently adopted by English native scholars. That is to say, English native scholars frequently use these indefinite degree adverbs (relatively, widely, largely, and highly). It is especially noteworthy that Chinese scholars prefer to use the booster (mainly), which is different from English native scholars' preference for the down toner (relatively).

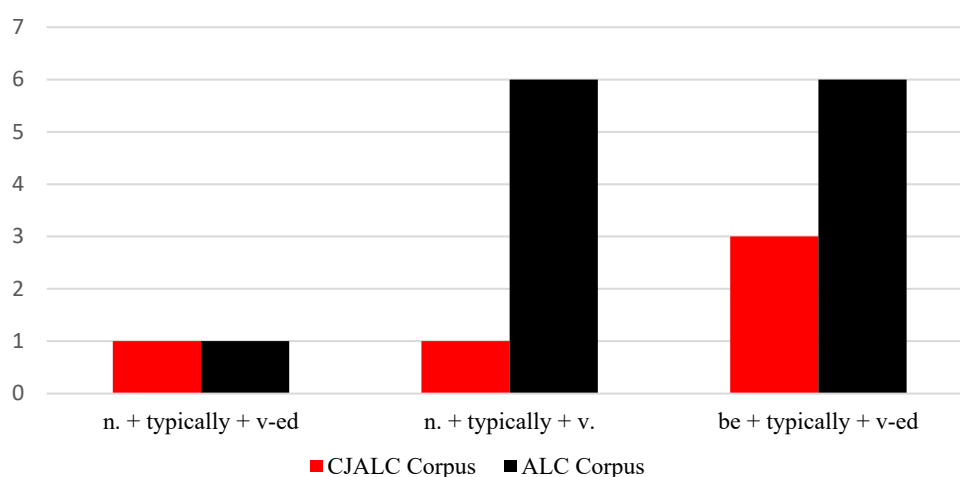


Fig 1. Frequency of common collocation sequences of *typically*

There are three common collocation sequences of typically in the two corpora: n. + typically + v-ed, n. + typically + v, and be + typically + v-ed. According to Figure 1, n. + typically + v-ed. occurs only 1 time in each corpus. The collocation sequence of n. + typically + v. appears 1 time in Corpus CJALC, while it occurs 6 times in Corpus ALC. And the collocation of be + typically +

v-ed adopted by Chinese scholars 3 times, but English native scholars used it 6 times. Among them, collocation sequence be + typically + v-ed is the most frequently used by both Chinese and English native scholars, while n. + typically + v. is also the most frequently used by English native scholars. However, a closer look reveals that English native scholars prefer to use this collocation be + typically + v-ed more than Chinese scholars. Comparatively, Chinese scholars have remarkably fewer collocation sequences of typically (chi-square=-22.861, p-value=0.000<0.05). It can be inferred that Chinese scholars can reasonably use attitudinal stance adverbs frequently used by English native scholars, but their awareness of using attitudinal adverbs still needs to be improved. Inadequate input is one of the underlying reasons for this preference (Ellis, 2005).

According to the chi-square and p-value of specifically are -20.526 (<0.00) and 0.000 (<0.05) separately, indicating that Chinese scholars use specifically dramatically less than English native scholars, which is congruent with the research of Zhao (2009) that Chinese scholars use less collocation sequences of stance adverbs than English native scholars. Besides, both Chinese and English native scholars prefer to use the adverb specifically with commas followed behind.

3.3. Comparative Analysis on Position of Stance Adverbs between CJALC and ALC

Table 5 presents the overall placement of stance adverbs in the Corpus CJALC and ALC. It indicates that Chinese and English native scholars are consistent in the position of stance adverbs. That is to say, both Chinese and English native scholars tend to use stance adverbs in the sentence-medial position, followed by sentence-initial and sentence-final position. Specifically, first of all, 421 cases of stance adverbs appear in the middle position of sentences in CJALC Corpus and 778 cases in ALC Corpus. Furthermore, 58 instances of stance adverbs occur in sentence-initial placement in CJALC and 67 instances in ALC respectively. Lastly, there are only 3 and 5 cases of stance adverbs in sentence-final position in CJALC and ALC separately.

Table 5. Position of stance adverbs in CJALC and ALC

Sentence Position	Frequency		Chi-square	P
	CJALC	ALC		
Initial	58	67	-8.212	0.004
Medial	421	778	-292.234	0.000
Final	3	5	-0.811	0.368

Obviously, Chinese scholars and English native scholars are both inclined to put stance adverbs in sentence-medial most frequently. Pan (2012) pointed out that stance adverbs are located in the middle of a sentence and usually serve as modifiers to emphasize a single clause.

As can be seen from Table 6, both Chinese and English native scholars share similarities in the placement of the subcategories of stance adverbs. It can be found that neither Chinese nor English native scholars place stance adverbs in sentence-final. They both like to place epistemic, attitudinal and style-of-speaking in the medial of a sentence. There are three details deserving our attention. First, both Chinese and English native scholars prefer using epistemic stance adverbs to the other two subcategories. Second, English native scholars and Chinese scholars both prefer to use epistemic most frequently, attitudinal less and style-of-speaking the least. Third, English native scholars use significantly far more epistemic, attitudinal and style-of-speaking stance adverbs in the medial than Chinese scholars do. Halliday (1994) claims that stance adverbs appear at the beginning of a sentence, which means that the author interprets

his attitude towards the content of the proposition from his own perspective and establishes his authority. Pan (2012) also reveals that stance adverbs at the end of sentences are not conducive to efficient processing of information by readers, so they are not common in academic discourse. Adverbs at the end of sentences are more common in oral expression, that is, speakers supplement their content.

Table 6. Overall placement of stance adverbs

Category	Sentence Position	Frequency		Chi-square	P
		CJALC	ALC		
epistemic	Initial	44	40	-1.432	0.232
	Medial	356	599	-192.805	0.000
	Final	1	2	-0.110	0.741
attitudinal	Initial	3	12	-8.084	0.004
	Medial	43	100	-49.758	0.000
	Final	1	1	-0.202	0.653
style-of-speaking	Initial	11	15	-2.476	-0.116
	Medial	22	79	-57.675	0.000
	Final	1	2	-0.110	-0.741

4. Conclusion and Implications

It can be concluded from the above analysis that there are some differences between Chinese scholars and English native scholars in the frequency, collocation sequence and position of stance adverbs, which indicates that Chinese scholars have not fully mastered the usage of stance adverbs (Chen & Zhang, 2010).

Owing to the great importance of and difficulty in the acquisition of stance adverbs, we strongly recommend that as for Chinese EFL teachers, they should help the Chinese learners of English as Second Language to enhance their awareness of using stance adverbs and express their positions more appropriately. To be specific, teachers can guide them to use generalizations of rules for different categories of stance adverbs and teach them to be as little affected by negative transfer of mother tongue as possible. Besides, it is necessary for Chinese EFL teachers to guide their students to apply the usage features and collocation sequences of these stance adverbs to learners' own academic writing. In this way, L2 learners can express their positions appropriately and flexibly as much as possible.

Then, as far as second language learners are concerned, they should take the initiative to learn from professional writers how to properly express their positions in academic writing. In addition, L2 learners should also be aware of the need to use different stance adverbs expressing their positions appropriately according to different disciplines, registers and genres.

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