

An Error Analysis of Coordinating Conjunction Misuse in Chinese ESL Learners' Writings: A Corpus-based Approach

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Abstract

Coordinating conjunctions, which are more recurrently used words than the other words in English, are not as easily well-acquired by Chinese students as they are intuitively used by native speakers. Yet, insufficient attention has been drawn to the study of coordinating conjunctions, which often leads to great difficulties in the acquisition of coordinating conjunctions for Chinese English as a second language learners. The present thesis has selected the three coordinating conjunctions of higher frequency, *and*, *but* and *or* as the target words in the research to analyze the misuse of these words in Chinese ESL learners' writings of English under the theory of Error Analysis. The thesis established two corpora: Learner Corpus with 21 theses of Chinese graduate students of English major, downloaded from China National Knowledge Infrastructure (CNKI); Control Corpus with 22 theses from Proquest-PQDT. All the dissertations were essay writings about linguistics and were randomly selected. It was shown that there existed a minor gap in the frequency usage of coordinating conjunctions *and*, *but* and *or* between Chinese students of English major and native English speakers. However, the usages of SIA (Sentence-initial And) and SIB (Sentence-initial But) were strongly different between Chinese ESL learners and native English speakers. The conclusions above could serve as pedagogical references for English teachers in China so that Chinese ESL learners could come close to native speakers in terms of the usages of the three coordinating conjunctions *and*, *but* and *or*.

Keywords: coordinating conjunctions, error analysis, corpus, second language acquisition

1. Introduction

As is stated by Milton and Tsang (1993), writing in a foreign language requires the writer to demonstrate mastery of not only the form but also the function of the target language. Errors, as a natural part of an ESL learner, can't be avoided completely. In the ESL field, there is a general movement from approaches emphasizing the product (the error itself) to approaches focusing on the underlying process (why the error was made). As is pointed out by Kroll and Schafer (1978), instead of viewing errors as pathologies to be eradicated or diseases to be healed, the error-analyst views errors as necessary stages in all language-learning, as the product of intelligent cognitive strategies and therefore as potentially useful indicators of what processes the student is using, and teachers have begun to view errors as exceptionally interesting clues about what is going on in students' minds.

Conjunctions are important tools in writing. They function as cohesive "signposts" in discourse that help guide the reader or listener through the message by signaling how successive units are related (Leech & Svartvik, 1994, p. 177). Among all the conjunctions, coordinating conjunctions *and*, *but* and *or* are the more frequently used words. They play a vital role in textual coherence. Nevertheless, there is still a gap in the usage of coordinating conjunctions between Chinese students and native English speakers. A number of studies show that ESL learners have great difficulties in using conjunctions. In order to improve Chinese students' writing ability, it is a necessity for exploring the differences and the underlying causes for the differences.

Based on previous researches on conjunctions, this study will further discuss the general characteristics of coordinating conjunctions (*and*, *but*, *or*) in the theses of Chinese students of English major compared with those of native English speakers. This study will focus on the following questions:

- 1) What are the general characteristics and differences of coordinating conjunctions in the writings of Chinese students of English major compared with those of native English speakers?
- 2) What are the types of errors of coordinating conjunctions made by Chinese students of English major in their

writings?

3) What are the underlying causes for these errors?

2. Literature Review

2.1 Previous Studies of Conjunction

2.1.1 Corpus-Based Studies

With the development of corpus linguistics, corpus-based method has become one of the most important approaches to study language acquisition. Many researchers have proposed their suggestion on teaching pedagogy based on the result of their studies. The studies on conjunctions involve the following questions. First, do the ESL learners overuse or underuse conjunctions, and second, do ESL learners prefer to use diverse conjunctions or simple conjunctions?

No agreements have come to the conclusion concerning the question of ESL learners' overuse or underuse of conjunctions. The evidence of the trend of ESL learners to overuse conjunctions is found in some studies, though the ratio of overuse differs from one research to another (Milton & Tsang, 1993; Bolton et al., 2003). Others suggest that no evidence of overusing conjunctions is found by ESL learners (Chen, 2006; Granger & Tyson, 1996). Narita, Sato and Sugiura (2004) compare the usage of 25 conjunctions in essays between advanced Japanese university students and native English counterparts. Their research findings show that both groups share a common set of high-frequency conjunctions, but in terms of individual conjunction usage such as overuse these conjunctions in sentence-initial position, there are obvious differences.

In terms of conjunction diversity used by ESL learners, different results are also found. It is observed from Tapper's (2005) study that the Swedish learners use slightly more types of conjunctions than the American students. But contrastive results are found in other studies in terms of conjunction diversity. Zhao (2003) finds out that Chinese students use conjunctions with higher intensities but less diversity than native students. Yuan's (2012) study also proves the conclusion above. According to Wu (2012), Chinese learners tend to overuse conjunctions compared with native English speakers, but the conjunctions Chinese learners use are limited to certain simple and high frequency conjunctions. Zhao and Wang (2019) has found that with native English speakers, Chinese students generally overuse conjunctions, and this situation is more commonly found in the students of average universities than in those of elite universities.

2.1.2 Experimental Studies

Experiments are also a vital approach to study second language acquisition. In an experimental study, students are often given a topic and are required to finish writing within a certain amount of time. Crismore (1980), Neuner (1987) and Field and Yip (1992) adopt this approach to the study of the acquisition of conjunctions by ESL learners. Crismore (1980) shows that there is a difference in ability to use formal conjunction according to the grade levels. Students, in general, have not mastered the conjunctions needed for literacy by the time they are in colleges. Neuner (1987) reveals that the usage of cohesive devices is not the main criterion of scoring writings. In Field and Yip's (1992) study, they find out that there are obvious differences in conjunction use between Chinese ESL learners and native English speakers, and many Chinese ESL learners misuse and overuse conjunctions such as 'on the other hand', 'besides', 'also' and 'moreover'. The word 'actually', which is an informal word, shows in the writings of Chinese ESL learners because it is a word used often in the speaking of Chinese teachers.

2.2 Previous Studies of Coordinating Conjunctions and, but and or

2.2.1 Interview

Zhu (2012) adopts the method of interview to investigate students' awareness of conjunction usage in making the composition coherent and cohesive. The result shows that most students' understanding of *and* remains at the preliminary stage. They have a strong tendency to use *and* to indicate additive meaning, connecting words, phrases, clauses or sentences. This is the most common usage of the conjunction *and*, while other usages of *and* are often neglected by them in their writings. The interview also reveals that the importance of the conjunction *and* in English learning is not generally recognized, and its usage is considered to be very simple.

2.2.2 Corpus-Based Approach

Cao (2009) conducts a corpus-based study and it is concluded that, generally speaking, Chinese students nearly use too many simpler conjunctions than native English speakers. Zhu (2012) summarizes the improper uses of the conjunction *and* in the compositions of Chinese undergraduate students of English major. Zhu (2012) categorizes the error patterns into six aspects, i.e., omission of *and*, redundancy of *and*, improper uses in

sentence structure, semantics and tense, as well as parts of speech. In addition to the analysis of misuse, the meaning of coordinating conjunctions is also studied. Alarcon and Morales (2011) find out that addition positive (e.g., *and*) comprised 20.86% of the total conjunctions, following addition negative (e.g., *but*)—the most popular that accounted for 23.62% (Nguyen, 2013). Zhang (2009) finds out that although '*and*' is frequently used by both Chinese EFL learners and native English, and the logical semantic relations that *and* is used to signal in the two corpora are significantly different: '*and*' is used generally to indicate progressive and causal logical semantic relation between clauses by Chinese learners, whereas it is frequently used to express progressive and illustrative logical semantic relations by native speakers.

It can be revealed from the researches above that the emphasis of language research shifts from the external environment to learners themselves and mental factors of learners (Pan, 2006). Still, in order to have a comprehensive knowledge of the use of coordinating conjunctions in second language acquisition, more questions involving other aspects of the usage of coordinating conjunctions need to be answered, such as the preference differences in using coordinating conjunction expressions and the usage of SIA/SIB between Chinese ESL learners and native speakers.

A corpus-based approach was used in this study to understand the similarities and differences of using coordinating conjunctions between Chinese ESL learners and native English speakers. Essays on the topics of linguistics were chosen as the materials.

3. Data Collection

In order to explore the different usages of coordinating conjunctions between Chinese ESL learners and native English speakers and examine the results revealed by other researches, two corpora were established: Learner Corpus with 21 theses of Chinese graduate students of English major, downloaded from China National Knowledge Infrastructure (CNKI), forming a 365,364 words corpus; Control Corpus with 22 theses from Proquest-PQDT, forming a 480,649 words corpus, with each author's name carefully checked to ensure that they were native English speakers. All the dissertations were about linguistics and are randomly selected.

During the process of analyzing learner corpus, it was prevalent to use frequency data, which includes both the learners' overuse or underuse of a certain word and error forms. Due to the fact that the learner corpus was quite large, it was impossible to have frequency data through manual work. That's why software tools were a critical part of learner corpus research (Ellis & Barkhuizen, 2005). In the study, WordSmith 6.0 was used to analyze the data. All dissertations in the corpora were transformed to TXT texts form, and the catalogue, abstract, appendix, references and notes were excluded from the corpora.

4. Data Analysis

The usages of the three coordinating conjunctions in Learner Corpus and Control Corpus are presented in the tables below, and the different usages between Chinese ESL students and native English speakers will be discussed.

4.1 *and*, *but* and *or*

Table 1. Overall frequency of *and*

	Learner Corpus	Control Corpus
Hits of <i>and</i>	11380	13145
Corpus size in words	365364	480649
Frequency of <i>and</i>	31.15/1000	27.35/1000

As is shown in Table 1, *and* was used 11380 times in the 365364-word Learner Corpus while 13145 times in the 480649-word Control Corpus. Considering that the amount of total words of these two corpora differed from each other, the calculation of the frequency of '*and*' in the whole corpus was done following by using the formula:

$$\text{Frequency of } and = \text{hits of } and / \text{Total Words in the Corpus}$$

Following the formula above, the frequency of *and* in Learner Corpus was calculated to be 31.15 per 1000 words, higher than that of Control Corpus, which was 27.35 per 1000 words. As we can see, the conjunction *and* was a more frequently used word not only by Chinese English learners but also by native English speakers. However, the data indicate that although Chinese graduate students of English major were conceived to be advanced-level English learners, they used 3.8 more *and* per thousand words compared with native English speakers.

Table 2. Overall frequency of *but*

	Learner Corpus	Control Corpus
Hits of <i>but</i>	888	1112
Corpus size in words	365364	480649
Frequency of <i>but</i>	2.43/1000	2.31/1000

The frequency of *but* in Learner Corpus was 2.43 per 1000 words, a little higher than that of Control Corpus, which was 2.31 per 1000 words. The subtle difference implies that the ability of using *but* of Chinese students of English major was similar to that of native speakers in terms of frequency.

Table 3. Overall frequency of *or*

	Learner Corpus	Control Corpus
Hits of <i>or</i>	1533	2481
Corpus size in words	365364	480649
Frequency of <i>or</i>	4.19/1000	5.16/1000

As is shown in Table 3, Chinese students of English major used *or* 4.19 times per 1000 words, while native speakers used *or* 5.16 times per 1000 words. Although the difference was not obvious, the result was the same as Cao's (2009) study, claiming that Chinese EFL learners used fewer conjunctions *or* than native speakers.

To sum up, in terms of frequency among the three coordinating conjunctions, *and* was the most frequently used conjunction both in the writings of Chinese students of English major and native English speakers. The second word came the conjunction *or*, and the conjunction *but* ranked the third.

Table 4. Left collocates of *and*

Rank	Learner Corpus	Control Corpus
1	Language/138	Language/209
2	Words/97	Gender/168
3	English/96	Boersma/94
4	Efficacy/95	Attitudes/89
5	Process/79	Jesney/81
6	TOA/75	English/65
7	Chinese/73	1/63
8	Meaning/67	CZECH/62
9	Theory/65	Knowledge/58
10	More/63	Learning/58

In Table 4, it can be seen that *Language* and *English* were both used as the top 10 left collocates of conjunction *and* because of the topic of the writings in the corpora. Apart from the two words, the other eight words used to collocate with conjunction *and* were quite different in the two corpora due to different minor topics in linguistics. Attention also needs to be paid to the last left collocates of conjunction *and* in Learner Corpus in Table 4—*more*, which shows 63 times to collocate with *and*.

Table 5. Right collocates of *and*

Rank	Learner Corpus	Control Corpus
1	The/1049	The/798
2	So/157	A/154
3	It/155	That/139
4	English/139	In/109
5	Then/130	Is /98
6	Their/114	Motivation/95
7	A /96	How/89
8	In/77	Levelt/86
9	They/69	To/85
10	Other/67	Learning /58

In Table 5, *so* was used 157 times in the Learner Corpus, ranking the second among the right collocates of *and* to indicate cause and effect logic, while such usage was not found in the Control Corpus. Besides, *then* was used 130 times in the Learner Corpus, ranking the fifth among the right collocates of *and*, while such usage was also not found in the Control Corpus.

Table 6. Clusters of *and* (Word Length: 3)

Rank	Learner Corpus	Control Corpus
1	And so on/157	Boersma and levelt/102
2	Self efficacy and/100	Jesney and tessier/86
3	And English writing/70	Gender and sexuality/83
4	Adaptation and selection/64	And motivation in /58
5	More and more/63	Gender and sexual/52
6	Efficacy and English/62	Attitudes and Motivation/51
7	And it is/58	Language and identity/51
8	Home and abroad/53	The boersma and /45
9	At home and/53	And levelt 2000/44
10	English and Chinese/53	Of gender and /40

In Table 6, the phrase *more and more* was used 63 times in the Learner Corpus. It shows that Chinese learners had the preference of using the expression *more and more* while native speakers didn't.

Table 7. Left collocates of *but*

Rank	Learner Corpus	Control Corpus
1	Meaning/13	Knowledge/10
2	Language/12	Language /10
3	English/11	All/8
4	Words/11	English /8
5	Form/10	It/8
6	Last/10	Is/7
7	Communication/7	And/6
8	Knowledge/5	Before/6
9	Learning/5	Choice/6
10	Tests/5	Languages /6

It is unveiled in Table 7 that *all* shows 8 times in the Control Corpus, ranking third among the left collocates of conjunction *but*, forming the phrase *all but*, while *all* was not on the top 10 left collocates list in the Learner Corpus. It shows that native English speakers took *all but* as normal phrases in English writing but Chinese learners usually didn't. Chinese learners usually saw *but* as a contrastive conjunction, and they usually neglected other usages of *but* other than a contrastive conjunction. In the phrase *all but*, *but* was a preposition, which was unfamiliar to Chinese learners.

Table 8. Right collocates of *but*

Rank	Learner Corpus	Control Corpus
1	Also/126	Also/87
2	The/97	The /62
3	It/59	Not/61
4	In/42	Rather /51
5	Not/38	It/48
6	They/32	That/34
7	When/19	In/33
8	He/17	I/31
9	This/16	He/25
10	There/15	They /22

According to Table 8, although the frequency of *but also* was almost twice in Chinese students' writings than

that of native speakers, it ranked 1 in both corpora, which means that both Chinese learners and native speakers were tending to use the phrase *not only... but also* with a high frequency. Besides, among the top 5 right collocates of *but*, both groups shared similarity in using 4 same words, which were *also*, *the*, *not*, *it*. It means that apart from the fact that Chinese learners overused the phrase *not only... but also* than native speakers, Chinese English students' usage of right collocations with *but* was close to native speakers. Furthermore, both native speakers and Chinese students used *but* before pronouns as turning-point.

Table 9. Clusters of *but* (Word Length: 3)

Rank	Learner Corpus	Control Corpus
1	But it is/19	But it is/21
2	But also the/15	But at the/8
3	Last but not/10	But not in/7
4	But not the/10	But also to/7
5	But there is/9	But also the/7
6	But in fact/9	But they are/6
7	But not least/8	But does not/6
8	But also in/8	Across languages but/5
9	But from the/7	But this is/5
10	In form but/7	But also for/5

According to Table 9, both Chinese ESL learners and native English speakers preferred using *but also* to connect nouns and prepositional phrase. The difference lies in that Chinese learners had the preference to use the phrase *last but not least* to introduce the last point. The phrase was also common in the writings of many English tests such as CET4, CET6 and TEM8. Chinese English learners usually used the pattern *first, second, third, last but not least* in order to show logical connection in their writings.

Table 10. Left collocates of *or*

Rank	Learner Corpus	Control Corpus
1	He/33	And/61
2	His/31	Whether/41
3	Meaning/27	One/35
4	Words/25	Positive/32
5	Readers/24	Gender/29
6	Two/19	His/25
7	Word/19	Two/20
8	More/16	More/18
9	Information/13	Mac/16
10	One/12	Little/14

According to Table 10, both Chinese students of English major and native speakers liked to use the conjunction *or* after numbers.

Table 11. Right collocates of *or*

Rank	Learner Corpus	Control Corpus
1	Not /53	The /83
2	The /51	Not /68
3	A /34	A /58
4	She /34	More /53
5	Her /33	Other /38
6	More /28	Negative /31
7	Audience /21	Her /28
8	Other /20	In /28
9	Less /17	To /26
10	To /15	Even /25

According to Table 11, *not* was both often used as the right collocate with *or* in the Learner corpus and Control corpus. From Tables 10 and 11, it can be seen that the phrase *he or she, more or less* was frequently used in Learner Corpus.

Table 12. Clusters of *or* (Word Length: 3)

Rank	Learner corpus	Control corpus
1	He or she/34	Whether or not/44
2	His or her/32	Positive or negative/30
3	Readers or audiences/20	His or her/24
4	Two or more/18	One or more/20
5	More or less/17	Or the other/18
6	The same or/10	Two or more/16
7	A word or/9	Mac or PC/16
8	Positive or negative/8	Little or no/14
9	Or not the/8	No cerebral or/12
10	Or not for/8	He or she/12

According to Cao (2009), the most frequent collocates of *or* used by Chinese students were phrases *he or she* and *his or her* while native speakers did not use the phrases as frequently as Chinese students did. However, the tables above show that although native speakers also used *he or she* with less frequency, *his or her* was used as the top 3 clusters of *or* as Chinese learners did.

In the current study, phrases *whether or not, positive or negative* were used a lot by native speakers, while Chinese students used *positive or negative* with a lower frequency. Chinese students overused the phrase *more or less* but underused the phrase *whether or not*.

4.2 Sentence-Initial And/Sentence-Initial But

Bell (2010) studied Sentence-initial And (SIA) and Sentence-initial But (SIB) in academic writing. He claimed that both SIA and SIB had three functions: First, to mark off a discourse unit by indicating the last item on a list, which was the most common function of SIA; second, to indicate the development of an argument, which was the most common use of SIB; and third, to indicate a discontinuity or shift from a previous discourse unit.

According to Zhu (2012), compared with Chinese English major undergraduates' writings, native speakers liked to put high frequency conjunction *but* in the first place of sentences. Bell (2010) also found that SIA and SIB were far more prevalent in humanities journals across different genres of academic writing. Furthermore, it was shown that SIA, when compared with other additive conjunctions such as *moreover, furthermore, in addition*, etc., was the most frequently occurring additive marker in academic writing, while SIB was the second most preferred "contrastive" conjunction after *however*.

In the current study, quotes and direct speeches were excluded from counting the frequency of SIA/SIB. The frequency of SIA was calculated by following the formulas below:

$$\text{Frequency of SIA} / \text{Total Corpus} = \text{Hits of SIA} / \text{Total Words in Corpus}$$

$$\text{Frequency of SIA (and)} = \text{Hits of SIA /and in Corpus}$$

Table 13. Frequency of SIA

Frequency	Learner Corpus	Control Corpus
Hits of SIA	267	58
Words of corpus	365364	480649
SIA/total corpus	0.73/1000	0.12/1000
SIA*1000/and	23.46/1000	4.41/1000

Table 13 shows that there existed great difference in using SIA between Chinese learners and native speakers. There were 267 SIA in Learner Corpus and 58 SIA in Control Corpus. The frequency of SIA in Learner Corpus was 0.73 per 1000 words but that in Control Corpus was as low as 0.12 per 1000 words, which means Chinese English-major students used SIA 6 times more than native English speakers. In terms of the frequency of SIA among all the *and* used in the writings, the frequency of SIA accounted for 23.46 per 1000 words of the overall

use of *and* in Learner Corpus, while only 4.41 per 1000 words in Control Corpus. It indicates that in terms of the position of *and*, Chinese English-major students used SIA 5 times more than native English speakers in putting *and* in sentence initial position.

Table 14. Frequency of SIB

Frequency	Learner Corpus	Control Corpus
Hits of SIB	155	76
Words of corpus	365364	480649
SIB /total corpus	0.424/1000	0.158/1000
SIB / <i>but</i>	174.5/1000	68.35/1000

Table 14 indicates that 155 SIB occurred in Learner Corpus, which suggests that the frequency of SIB was 0.424 per 1000 words, while only 76 SIB occurred in the Control Corpus, making the frequency of SIB 0.158 per 1000 words. The frequency of SIB used by Chinese students was around 3 times over that of native speakers. In every 1000 *but* used in the writings of Chinese students, 174.5 of them were SIB, while in the writings of native speakers, SIB occurred 68.35 times out of each 1000 *but*.

As for Chinese learners, they showed a tendency to use more SIA compared with SIB, almost twice. In contrast, native speakers tended to use more SIB rather than SIA to a small extent, which was in concordance with the findings of Bell (2010), saying that while conjunction *and* was more frequent in academic prose than *but*, SIA shows much less frequently than SIB.

Table 15. Collocation of SIA/SIB

	Learner Corpus	Control Corpus
SIA+ Interrogative/SIA	7.49/1000	137.93/1000
SIA+Adverb (Adverbial Phrase)/SIA	172.28/1000	344.83/1000
SIA+Emphatic Sentence	7.49/1000	172.41/1000

Nguyen (2013) argued that *SIA+ Interrogative* as well as *SIA+ Adverbial Phrases* were the two main structural categories which *and* colligates with but other additive conjunctions such as *in addition*, *furthermore* or *moreover* did not. Native speakers show an ability of using SIA in various sentence structures. However, it is obvious that Chinese students lacked such ability.

In terms of using SIA, Chinese learners used only two *SIA + Interrogative* structures, with the frequency being 7.49 per 1000 words, while native English speakers used 8 out of the altogether 58 SIA, the frequency being 137.93 per 1000 words, more than 18 times compared with Chinese learners. The frequency of *SIA + Adverb (Adverbial Phrase)* structure was 172.28 per 1000 words for Chinese students, while 344.827 per 1000 words for native speakers. There were altogether 10 *SIA + Emphatic sentences* in native speakers' dissertations, frequency accounting for 172.41 per 1000 words, while there were only two such structures in Chinese students' dissertations, the frequency being 7.49 per 1000 words. But it is worth noticing that 9 out of the 10 *SIA+ Emphatic Sentence* structures in native speakers' dissertations came from TEXT 12, which may be contributed to the writer's preference.

Thus, we can come to such a conclusion that Chinese learners overused SIA than native speakers, however, native speakers used SIA to collocate with a variety of sentence structures while Chinese students used SIA in a simple way.

The table below shows the usage and frequency of *SIA+Adverb (Adverbial Phrase)*. Table 16 is from the writings of Chinese learners and the Table 17 is from the writings of native speakers.

Table 16. *SIA+Adverb (Adverbial Phrase)* from Learner Corpus

SIA+Adverb (Adverbial Phrase)	Times/SIA	Frequency/SIA
And then	27/267	0.10112
And therefore	3	0.01124
And thus	3	0.01124
And later	3	0.01124
And finally	1	0.00375
And nowadays	1	0.00375
And so	1	0.00375
And of course	1	0.00375
And recently	1	0.00375
And in general	1	0.00375
And only in this way	1	0.00375
And to some degree	1	0.00375
And almost	1	0.00375
And on the other hand	1	0.00375
	46/267	0.17228

Table 17. *SIA+Adverb (Adverbial Phrase)* from Control Corpus

SIA+Adverb (Adverbial Phrase)	Times /SIA	Frequency/SIA
And yet	4/58	0.06897
And, indeed	4	0.06897
And again	2	0.03448
And, of course	1	0.01724
And finally	1	0.01724
And conversely,	1	0.01724
And most importantly	1	0.01724
And then	1	0.01724
And sometimes	1	0.01724
And lastly	1	0.01724
And in fact	1	0.01724
And furthermore	1	0.01724
And on the contrary	1	0.01724
	20/58	0.344828

It is worth noticing that “*And then*” was used 27 times in Chinese learners’ dissertations, which occupied about 0.10112 of all the *And+Adverb/Adverbial Phrase* structure, while “*And then*” shows only once in native English speakers’ dissertations, with the frequency being 0.01724. Chinese students showed a strong tendency of overusing the phrase “*And then*” in sentence initial position. However, “*And then*” was used only once by native speakers. This was in concordance with previous findings of usage of *and then*. It is generally believed that it was contributed to the negative transfer of “然后”, which was a common expression in connecting ideas in Chinese. Apart from “*And then*”, none of the other nine *And+Adverb/Adverbial Phrases* is the same between these two corpora.

5. Conclusion

The conclusions of this article are drawn after making a precise comparison between the Learner Corpus and the Control Corpus. First of all, there exists a minor gap in the frequency usage of coordinating conjunctions *and*, *but* and *or* between Chinese students of English major and native English speakers. Both *and* and *but* are overused by Chinese learners to a minor degree, while *or* is slightly underused by Chinese learners. In terms of frequency among the three coordinating conjunctions, *and* is the most frequently used conjunction both in the writings of Chinese students of English major and native English speakers. The second word comes *or*, and *but* ranks the third. Second, Chinese learners and native speakers have different preferences in using coordinating conjunction expressions, which means that Chinese learners are not native like in using them. To be specific, Chinese learners tend to overuse *and so*, *and then*, *more and more*, *and so on*, *home and abroad (at home and abroad)*, *not only... but also*, *last but not least*, *he or she*, *more or less* compared with native English speakers, while underuse the phrase *all but*, *whether or not*, *positive or negative*. Third, enormous difference exists in using SIA between Chinese learners and native speakers. More Chinese learners overuse SIA over six times than native speakers. The frequency of SIB used by Chinese students is around three times more than that of native

speakers. What's more, Chinese learners show a tendency to use more SIA compared with SIB, almost twice. In contrast, native speakers tend to use more SIB rather than SIA to a small extent. Fourth, native speakers show an ability of using SIA in various sentence structures, while Chinese students lack such ability. Nevertheless, in using *SIA+Adverb (Adverbial Phrase)* in the sentence initial position, native speakers use *SIA+Adverb (Adverbial Phrase)* in sentence initial position twice more than that of Chinese learners, while Chinese students show a strong tendency of overusing the "And then" in the sentence initial position. The study of the similarities and differences of using coordinating conjunctions will greatly help Chinese English teachers in their language teaching and Chinese ESL learners in their writing abilities.

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