

# A Corpus-based Comparative Analysis on the Connectives Used in Chinese and Swedish Students' Essays

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## Abstract

*This research aims at comparing Chinese and Swedish EFL learners' using of connectives. The corpus used in this study, established by Wuhan University and Stockholm University, includes Chinese Subsets of English Learners (CSEL 1-3) and Swedish Subsets of English Learners (SSEL 1-3). This study adopts a Chi-square test to evaluate the results which show that there is a significant difference between the using of connectives by Chinese and Swedish students ( $\chi^2=.000, df=4, \rho < 0.05$ ), although Chinese and Swedish students both use additive connectives most and never use transitional connectives. The reasons behind the results are speculated from the perspectives of language transfer and language habits. This study calls upon more scholars to concentrate on the comparison between EFL learners' using of connectives.*

**Key words:** Connectives; Chinese Subsets of English Learners; Swedish Subsets of English Learners; Comparative analysis

## 1. Introduction

The origin of connectives can be traced back to Hellenic times (Robins, 1967). Thrax first gave a definition of connectives that was a part of speech binding together the discourse and filling gaps in its interpretation. Halliday and Hason (1976) were the pioneers who did the researches on connectives. They defined connectives as linkages between components of texts. For English as foreign language (EFL) learners especially, connectives' contribution to text comprehension is of paramount significance (Asassfeh, 2014). Both Chinese scholars and researchers abroad took comparative studies of the use of connectives. Many studies have investigated classifications of connectives as well as comparatively analyzed the usages of connectives by different countries. Halliday and Hasan (1976) divided English connectives into four types that were additive, adversative, casual and temporal logical connectors. Celce-Murcia and Larsen-Freeman (1985) simplified Halliday and Hasan (1976)'s version. Quirk(1985) classified connectives into seven types. After concluding most of the classifications introduced in previous researches, Tapper (2005) put forward a new one including six types of connectives. According to Lu (2010)'s study, Chinese scholars also conducted researches on the classification of connectives. For example, simple connectives are all one-word connectives, while participle connectives are all participles. Most of the studies at home and abroad only introduced a new classification without further explanations about what types were usually or seldom used by English learners, let alone compared the types of connectives used by both EFL learners. Similarly, for comparing studies about connectives, most scholars focused on the overuse of connectives instead of the classifications of connectives by English learners (Crewe 1990, Field & Yip 1992, Milton & Tsang 1993). What's more, the research subjects they chose were native speakers and EFL learners. Seldom did researchers compare both EFL learners from two countries.

Therefore, the purpose of this study is to figure out what the situation could be if the connectives used by two countries' EFL learners are compared together. Based upon it, this current study tries to answer the following research questions:

- (1) What are word frequencies of connectives used in both Chinese and Swedish students' essays?
- (2) Is there a statistically significant difference between Chinese and Swedish students' using of connectives?
- (3) What are the reasons for the differences and similarities between Chinese and Swedish students' using of connectives?

## 2. Literature Review

### 2.1 Connectives in English

Connectives, as the linkages between components of texts, can also be called links (Biber, 1988), conjunctions (Altenberg & Tapper, 1998), discourse markers (Fraser, 1999) except cohesive devices, logical connectors, linking words and transition words. Halliday and Hason (1976) defined connectives as words or phrases showed the interrelation between two statements or clauses in a text by explicitly specifying a conceptual relationship between statements.

**Example 1.** *The situation looked desperate, **but** they didn't give up hope.*

In this sentence, “but”, as Halliday and Hason said, is used to explain the contrastive relationship between “the situation looked desperate” and “they didn’t give up hope”. Biber et al. (2000) regarded connectives as words or phrases which stated the speaker’s or the writer’s viewpoint of the relationship between two parts of discourse.

**Example 2.** *I thought you wouldn't mind.*

*Well, **as a matter of fact** I don't; but you should have asked me first.*

Here, “as a matter of fact” is used as a corroborative connective to connect two parts of discourse. It supports the speaker’s opinion that “I don’t mind actually”, and connects the statement after. Quirk et al. (1985:631-647) also gave a similar explanation about connectives, that was, these cohesive devices indicated how the speaker viewed the connection between two linguistic units.

## 2.2 Features of Connectives

According to the research of connectives by Lu (2010), three main characteristics of connectives were concluded.

1. Connectives have two directions which point to two components in the sentences.

**Example 3.** *It was dark, **so** I couldn't see what was happening.*

The “so” in this sentence points to two directions, the component before “so” and the other after it. These two components are juxtaposed because of “so”.

2. Connectives are not modified by any other components.

**Example 4.** *The bank refused to help the company; **consequently**, it went bankrupt.*

Here, “consequently” is a connector which is not modified by other components.

3. Connectives cannot be used independently.

As Byrne (1979:18) said, connectives were words or phrases which indicated the relationship between or within sentences. Based on Lu’s research, connectives can be easily distinguished.

**Example 5.** *All these silly books are just **so** much waste paper!*

In this sentence, “so” doesn’t point to two directions, and it’s used to modify and be modified by “much”. These two words altogether are used as an adverb of degree. Therefore, the “so” here is not a connective.

## 2.3 Classifications of Connectives

Halliday and Hasan (1976) divided connectives into 4 types, additive, adversative, casual and temporal connectives. Apparently, compared this classification with Quirk (1985)’s and Tapper (2005)’s, it only mentioned four types of connectives, which are not detailed enough for conducting this research.

**Table 1. The Classification of Connectives by Halliday and Hasan**

<b>Additive</b>	e.g. and, or, nor, furthermore, alternatively
<b>Adversative</b>	e.g. yet, though, but, however, actually
<b>Causal</b>	e.g. so, hence, consequently, because of this
<b>Temporal</b>	e.g. at the same time, simultaneously, just then

(Adapted from Halliday and Hasan 1976)

Quirk (1985) gave a more elaborate classification which included seven types of connectives, listing, summative, appositive, resultive, inferential, contrastive and transitional connectives. However, it included most connectives but not all types of them. For instance, connectives like “indeed”, “in fact” and “in effect” didn’t appear in this table.

**Table 2. The Classification of Connectives by Quirk**

<b>Listing</b>	e.g. for a start, finally
<b>Summative</b>	e.g. in sum, altogether
<b>Appositive</b>	e.g. for example, namely
<b>Resultive</b>	e.g. as a result, consequently
<b>Inferential</b>	e.g. therefore, in that case
<b>Contrastive</b>	e.g. rather, again
<b>Transitional</b>	e.g. by the way, meanwhile

(Adapted from Quirk 1985)

Chinese scholar Lu (2010) introduced a classification of connectives as follows. These types were classified in accordance with the formats of connectives. Just as mentioned above, simple connectives were one-word connectives. Connective phrases were all phrases. Nevertheless, this kind of classification is not related to the meanings of connectives, so it’s not used in the current study.

**Table 3. The Classification of Connectives by Lu**

<b>Simple connectives</b>	e.g. and , for , but , yet , or , so , as , if , hence , until , after , since , lest , than , that , while , though , only , although
<b>Participle connectives</b>	e.g. provided(that), providing that, supposing, seeing ( that), considering
<b>Compound connectives</b>	e.g. however, therefore, whereas, nevertheless, insomuch
<b>Connective phrases</b>	e.g. as if, as though, as soon as, now that, in order that, on condition that, insomuch as, in case, no sooner than, no matter( who, when, where, what)
<b>Associated words</b>	e.g. Both... and, neither... nor, whether... or not, not only...but also
<b>Comparative connectives</b>	e.g. as well as , more than , rather than , no less than

(Adapted from Lu 2010)

Besides, compared with other scholars, Tapper (2005) summarized previous studies and divided connectives in detail. Tapper (2005)’s classification included six types of connectives, and among these six types, there were further divisions of each type. What’s more, it almost refers to all different types of connectives. Therefore, this classification is used in this research.

**Table 4. The Classification of Connectives by Tapper**

<b>Additive</b>	(a) listing (e.g. <i>first(ly), second(ly), to begin with, finally, last(ly), last of all</i> )
	(b) equative (e.g. <i>equally, likewise, similarly</i> )
	(c) reinforcing (e.g. <i>furthermore, in addition, moreover</i> )
<b>Clarifying</b>	(a) abstraction: exhaustive (e.g. <i>that is, i.e., in other words</i> ) exemplifying (e.g. <i>for example, for instance, such as</i> )
	(b) generality (e.g. <i>in general, generally</i> ) <i>in particular, particularly, specifically, to sum up, in short, in conclusion</i> )
<b>Contrastive</b>	(a) replacive (e.g. <i>better, rather, more accurately</i> )
	(b) alternative (e.g. <i>alternatively</i> )
	(c) comparative (e.g. <i>in comparison, by (way of) comparison</i> )
	(d) antithetic (e.g. <i>conversely, instead, oppositely</i> )
	(e) concessive (e.g. <i>in any case, anyway however, nevertheless, though</i> )
<b>Resultive</b>	(a) concluding (e.g. <i>as a consequence, as a result, so, therefore</i> )
	(b) inferential (e.g. <i>in that case, otherwise, if...then</i> )
	(c) explanatory ( <i>after all</i> )
<b>Transitional</b>	(a) exchange punctuating (e.g. <i>oh, well</i> )
	(b) tumbling (e.g. <i>now, well, okay, by the way, anyway</i> )
<b>Corroborative</b>	<i>in fact, actually, as a matter of fact, indeed</i>

(Adapted from Tapper 2005)

## 2.4 Previous Studies on Connectives

### 2.4.1 Studies on Research Contents

In compliance with the research contents of previous studies on connectives, they are capable of being divided into two types, studying the overuse of connectives and studying the reasons why students use connectives incorrectly or unsuitably.

For comparative analyses, the misuse of connectives was always the topic for scholars. Crewe (1990) did a research about the overuse of connectives by students from Hong Kong. The study showed that the connectives like “on the contrary” were always overused. Field and Yip (1992) found that students from Hong Kong overused connectives more frequently. To sum up, all the researches about the overuse of connectives seldom referred to the reasons behind the results and classifications of connectives. Therefore, the current research tries to fill these blanks instead of only judging whether students overuse connectives or not.

In conclusion, these researchers focus on the overuse of connectives and the reasons for why students misuse connectives. They have no intention of studying whether different classifications of connectives influence students’ using of connectives.

### 2.4.2 Studies on Research Subjects

A number of researchers, who study the differences and similarities between the usages of connectives by different subjects, often use comparative analysis as a research method. The advantage of it is to help work out how people from different countries or areas use connectives. To some extent, the researches using this method are endowed with the intercultural meanings.

(1) Chinese students & Native speakers

Field and Yip (1992) compared the A-level compositions written by students from Hong Kong and Sydney. They found that students from Hong Kong used more connectives than students did from Sydney. Furthermore, they even discovered that Cantonese students were prone to use more conjunctions as linkages in their essays. Deng (2007) compared Chinese students' argumentative essays with Canadians'. Pan & Feng (2004) proved that Chinese students were apt to overuse some of the connectives, which was similar to what was showed from native speakers' essays. The research made by Lorrita Yeung (2009) was to delineate how Chinese students used the connective "besides" through comparing Chinese learners' corpora with native experts' corpora. She pointed out that the use of connectives was not only related to its semantic meaning but also the pragmatic meaning.

#### (2) French students & Native speakers

The research conducted by Granger and Tyson (1996) was aimed at studying the differences and similarities between the using of connectives used by French students and native speakers. French students overused and underused some of the connectives among 180 connectives selected in this research. The researchers supposed that the phenomenon was relevant to the negative transfer of French.

#### (3) Swedish students & Native speakers

Different from other scholars' researches, the research done by Altenberg & Tapper (1998) was not only about a comparison between the essays written by Swedish students and British students. Those Swedish students were asked to write an essay in Swedish under the same topic of the one they wrote in English. This part differentiated this research from others. It revealed that Swedish students underused some connectives, and even when those students wrote in Swedish, they still didn't hit the nail on the head. What was different with the result found by Granger and Tyson (1996) was that these researchers didn't find any connections between the usages of connectives with negative transfer.

To sum up, all of these scholars mentioned above conducted researches on comparing native speakers with EFL learners. Hong Kong students are always singled out to be compared with native speakers. However, they cannot represent all Chinese students, since the education system and English education of Hong Kong is very different from the ones of mainland China.

### 2.4.3 Studies on Corpora Use

The corpus-based research is often used in the comparative study of connectives' usages. These corpora used in previous studies can be divided by the genres of these essays in those corpora. A great number of scholars chose argumentative essays written by students. As Granger and Tyson (1996) said that students used more connectives and more types of connectives in argumentative essays than any other genres of essays. Field and Yip (1993), Granger and Tyson (1996), Altenberg & Tapper (1998), Pan & Feng (2004), Deng (2007) and etc., these researchers all used argumentative essays written by students as the basis of the corpora. In contrast, some scholars used academic theses as discourses. Bolton (2002) picked out 10 untimed essays and 10 timed examination scripts written by Hong Kong students. In order to have a standardized reference, he chose an academic corpus called British component of the International Corpus of English (ICE-GB).

Overall, most researchers who intend to comparatively analyze the students' using of connectives adopt corpora to support their opinions. These corpora usually consist of argumentative essays. The way these scholars use corpus is a fine example for this current research.

### 3. Research Methodology

#### 3.1 The Corpus Used in the Research

The corpus used in this research is established by Stockholm University and Wuhan University. It includes two parts—Chinese Subsets of English Learners (CSEL 1-3) and Swedish Subsets of English Learners (SSEL 1-3). CSEL 1-3 are produced by third-semester English majors at Wuhan University, while SSEL 1-3 by English I students at Stockholm University. This corpus includes 200 texts written by those students. They are asked to write a 200 word essay on the same topic “Is it true that only rich countries can afford to worry about the environment?” Both groups of learners had learned English about 9 years by the time they wrote the texts. Without preparation in advance or access to any language tools, both sides of students are required to write the essay in 30 minutes. There are 1530 sentences and 1428 sentences respectively in CSEL 1-3 and SSEL 1-3. In total, the word quantity in CSEL1-3 is 23872, while the one in SSEL 1-3 is 25510. There are altogether 2364 ICE-GB connectives in this corpus.

#### 3.2 The Connectives Used in the Research

Since there are a large number of English connectives, only one research is not capable of covering all of them. British component of the International Corpus of English (ICE-GB) connectives concluded by Bolton (2002) were used in this study. This table concluded by Bolton (2002) also contained the frequencies of connectives per 1000 sentences as well.

**Table 5. Connectives in ICE-GB**

Connector	Frequency per sentence (× 1000)	
<i>however</i>	20.4	(92)
<i>therefore</i>	10.6	(48)
<i>but, then</i>	8.6	(39)
<i>thus</i>	7.8	(35)
<i>indeed</i>	5.5	(25)
<i>and, so</i>	4.0	(18)
<i>in fact</i>	3.5	(16)
<i>hence</i>	3.3	(15)
<i>moreover</i>	2.4	(11)
<i>consequently, first, on the other hand</i>	2.2	(10)
<i>rather</i>	2.0	(9)
<i>instead</i>	1.5	(7)
<i>nevertheless</i>	1.3	(6)
<i>again, in other words, nonetheless, secondly, second</i>	1.1	(5)
<i>as a result, on the whole, though</i>	0.9	(4)
<i>at the same time, firstly, on the contrary</i>	0.7	(3)
<i>alternatively, conversely, furthermore, in contrast</i>	0.4	(2)
<i>above all, accordingly, also, at any rate, by comparison, by contrast, finally, first of all, in any case, in effect, in short, in sum, in the event, in the first place, in total, in turn, lastly, or, overall, still, yet</i>	0.2	(1)
<b>TOTAL</b>	<b>107.8</b>	<b>(487)</b>

Notes: All connectors in the academic writing category, ICE-GB corpus (The Figures in parentheses are raw frequencies. Total number of sentences=4,507; total Number of words=85,628)

(Cited from Bolton 2002:174)

#### 3.3 Operational Definition of ICE-GB Connectives

According to Tapper's classification, ICE-GB connectives analyzed above could be classified into six types as follows,

**Table 6. The Classification of ICE-GB Connectives**

<b>Additive</b>	and, or, then, first, firstly second, secondly, also, at the same time, above all, finally, first of all, in the first place, lastly, in turn, still, furthermore, moreover
<b>Clarifying</b>	in short, in other words, overall, in sum, in total
<b>Contrastive</b>	but, however, though, on the other hand, instead, rather, on the contrary, nevertheless, yet, nonetheless, alternatively, conversely, in contrast, by comparison, in contrast,
<b>Resultive</b>	so, as a result, therefore, hence, consequently, in the event, accordingly
<b>Transitional</b>	again, at any rate, in any case
<b>Corroborative</b>	in fact, in effect, indeed

This classification contains six parts. Additive is used to list and juxtapose sentences. It divided into three types listing, equative and reinforcing connectives. Listing words are like “first”, “firstly”. “second”, “and”, “then” etc. There are few equative connectives among ICE-GB connectives. Words like “furthermore” and “moreover” belong to reinforcing connectives. Clarifying words are also called reformulating words. Abstraction connectives include “in other words”. The left clarifying connectives are also generality connectives. Contrastive is usually used as turning points in sentences and includes five types of connectives, replacive, alternative, comparative, antithetic and concessive. Resultive just like its literal meaning is used to connect reasons and results. Connectives like “so”, “therefore” are typical resultive connectives. Transitional words are more likely mood particles in connectives like “well”, “oh”, “anyway” etc. Corroborative includes words like in fact, in effect and etc.

### 3.4 Manual Sorting

However, some words are not only used as connectives, but also often used as prepositions, adjectives and so on. Therefore, not all the words sifted out from the corpus can be considered as connectives. Manuel sorting is an inevitable process for this research.

Words like “so” are not always used as connectives in discourses.

**Example 6.** *Is that so? (CSELI-3)*

Here, this “so” is used as a pronoun not a connective.

**Example 7.** *...if you happen to be lucky enough to live in a so called rich country! (SSELI-3)*

In this sentence, the word “so” is used as an adverb not a connective. Hence, these two types of “so” need to be eliminated artificially. Words like “first”, “second” and etc. these listing words can be used as nouns, adjectives and adverbs.

**Example 8.** *Since the first Industry Revolution, more and more factories were set up in rich countries. (CSELI-3)*

In this sentence “first” is used as an adjective. Except the words “so” and “first”, when the word “then” is used in the phrase “until then”, it is not a connective either. What makes the sorting easier is that this phrase doesn’t appear in the corpus.

Another manual sorting is about sorting out misspelled words. Students tried to use some words but

failed because of misspelling. Nevertheless, in order to make this research thorough and accurate, the author assumes that those misspelled words should be included as the connectives they used. For instance, in the SSEL 1-3, the word “therefore” are misused as “therefor” for six times. These six “therefor” could still be thought as connectives Swedish students used.

### 3.5 Research Instruments

AntConc 3.4.4 is used in this research for calculating and sorting out all the ICE-GB connectives. It was designed by Doctor Laurence Anthony from the School of Science and Engineering, Waseda University, Japan. The Concordance item is the frequently used function in this research. IBM SPSS Statistics 22.0 helps take chi-square test for proving whether there is a statistically significant difference between Chinese and Swedish students’ using of different connectives.

## 4. Results

### 4.1 The Word Frequencies of Connectives

**Table 7. The Word Frequencies of Different Types of ICE-GB Connectives**

Types	Connectives	CSEL 1-3	Frequency of per thousand	SSEL 1-3	Frequency of per thousand words (S)
<b>Additive</b>	and, or, then, first, firstly, second, secondly, also, at the same time, above all, finally, first of all, in the first place, lastly, in turn, still, furthermore, moreover	893	693.86	705	654.60
<b>Clarifying</b>	in short, in other words, overall, in sum, in total	5	3.89	4	3.71
<b>Contrastive</b>	but, however, though, on the other hand, instead, rather, on the contrary, nevertheless, yet, nonetheless, alternatively, conversely, in contrast, by comparison, in contrast,	258	200.47	313	290.62
<b>Resultive</b>	so, as a result, therefore, hence, consequently, in the event, accordingly	117	90.90	53	49.21
<b>Transitional</b>	again, at any rate, in any case	0	0	0	0
<b>Corroborative</b>	in fact, in effect, indeed	14	10.88	2	1.86

The table above shows the connectives’ types which are used by Chinese students and Swedish students. Chinese students use additive words 893 times (693.86‰), while Swedish students use 705 times (654.60‰). Contrastive words are used by Chinese students for 258 times (200.47‰), while by Swedish

students for 313 times (290.62‰). Chinese students use resultive connectives 117 times (90.90‰), corroborative connectives 14 times (10.88‰), clarifying words 5 times (3.89‰) and transitional words 0 time. By contrast, Swedish students use resultive connectives 53 times (49.21‰), corroborative connectives 2 times (1.86‰), clarifying words 4 times (3.71‰) and transitional words 0 time.

The most frequently used connectives are additive connectives for both Chinese and Swedish students (C: 693.86‰; S: 654.60‰). Contrastive words are the second frequently used connectives by Chinese and Swedish students (C: 200.47‰; S: 290.62‰). The third frequently used connectives by both countries' students are resultive words (C: 90.90‰; S: 49.21‰).

The tendency of using what kinds of connectives for both countries' students is similar. They all use resultive connectives most and transitional connectives least. For all of these students, contrastive words are the second frequently used connectives. What's more, both of them are prone to use less clarifying words and corroborative words.

## 4.2 The Chi-square Test

**Table 8. The Chi-square Test**

### Word Frequency \* Connectives Cross tabulation

		Connectives					Total
		additive	clarifyin g	contrastive	resultive	corroborative	
Word Frequency	Chinese students	893	5	258	117	14	1287
	Swedish students	705	4	313	53	2	1077
Total		1598	9	571	170	16	2364

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.300 <sup>a</sup>	4	.000
Likelihood Ratio	43.729	4	.000
Linear-by-Linear Association	.047	1	.829
N of Valid Cases	2364		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 4.10.

The first table shows the cross tabulation including six types of connectives used by both Chinese and Swedish students. All six types of connectives are tested by the chi-square test, but since both countries' students use transitional connectives 0 time, the chi-square test only shows 5 types of connectives. In accordance with the second table, the test, above, there is a significant difference between Chinese and Swedish students' using of different connectives ( $\chi^2=.000, df=4, p<0.05$ ).

## 5. Discussion

### 5.1 General Features of Connectives

With regard to the survey of classifications, it can be concluded that both countries' students use additive connectives most frequently (C: 693.86‰; S: 654.60‰). By contrast, both countries' students seldom use corroborative, transitional and clarifying connectives. In total, the proportion of all these three types of connectives used by Swedish is 5.57‰, while the one for Chinese students is 14.77‰. What needs to be noted is that Swedish students use more contrastive connectives (C: 200.47‰; S: 290.62‰), conversely, Chinese students use more resultive connectives (C: 90.90‰; S: 49.21‰). There's also an relatively obvious difference between Chinese and Swedish students' using of corroborative connectives (C: 10.88‰; S: 1.86‰).

### 5.2 Reasons for Features

1. Chinese students use more additive connectives than Swedish students (C: 693.86‰; S: 654.60‰), even though Swedish students also use additive connectives most. Altenberg (1999) found a considerably higher frequency of additive conjuncts in his Swedish data.

#### Example 9.

(1) ...*then* maybe we can all decide to choose anew *and* start prioritizing what is really important.

(2) They need wood to build houses, cook food *and* so on *and then* the desert spreads *and* it leads to starvation. (SSEL 1-3)

As the example show, Swedish students even use more than one additive connectives in one sentence.

2. However, for Chinese students, since words like “and”, “or” and “then” were all simple connectives (Lu 2010), they got used to making them as linkages in their essays. Chen (2010) also proved that Chinese students even easily overused additive connectives like “and”, “then” and “finally”. Another reason is that Chinese students always use listing connectives like “first”, “second”, “finally” etc. which belongs to additive words.

**Example 10.** *First, we should make clear...So, nearly every developing country pay less attention to the environment problems...Second, the poor countries have many things to worry about. (CSEL 1-3)*

3. Compared with other types of connectives, Chinese students use far more resultive words than Swedish students (C: 90.90‰; S: 49.21‰). During the data processing, it was found that connectives “so” are used by Chinese students most among all the resultive words, while Swedish students use very less. Therefore, displayed from a whole picture, the resultive connectives are used by Chinese students more. Furthermore, the reason why “so” is used by Chinese students more could be language transfer, since the pronunciation and meaning of “so” is very similar to the Chinese phrase “所以(suoyi)” as follows,

**Example 11.** *Because we live on the same earth, so they must pay attention to it.*

(CSEL1-3)

“Because” and “so” cannot be used in one sentence but they make up a fixed pattern in Chinese. Therefore, that is a kind of negative transfer for Chinese students.

4. Kanno (1989) put forward that corroborative connectives indicate the writer's conviction that the content of the following sentence is true. The reason why Chinese students use more corroborative

connectives is that Chinese students are probably better at listing facts to support their own opinions, compared with the Swedish.

### **Example 12.**

(1) *In fact, the pollution is awfully terrible in many countries.*

(2) *In fact, they have tasted the bitter fruit of ill-treating the environment.*

(CSELI-3)

As the example shows, Chinese students put corroboratives at the beginning of the sentences in order to inform readers that the following statement is true.

5. There is still a similarity between the using of transitional connectives by both countries' students. As Tapper (2005) proved that transitional relations are rarely found in Swedish students essays in her research, transitional connectives are never used by both countries students. One of the reasons is that there are only three ICE-GB connectives under the term of transitional connectives.

## **6. Conclusion**

This study reveals that although there's a significant difference between Chinese and Swedish students' using of different connectives, the similarities cannot be ignored either. Both countries' students use additive connectives most and never use transitional words. The reasons behind these results could be discussed from language habits and language transfer.

This research calls upon more and more researchers to focus on the comparison between non-native speakers instead of native speakers with EFL learners, since seldom do scholars choose both EFL learners as research subjects in the meantime. Students from Wuhan University are typical Chinese students who accept traditional Chinese English education. Students from Stockholm University can also be on behalf of typical Swedish students. The connectives comparison between two countries' students is not only about the using of connectives, but also indicates both countries' English education.

Besides, this study attracts more attentions to the connectives teaching. As the data show, no matter what education backgrounds the students have, all of them seem to be good at using simple connectives without thinking whether they overuse those words or not or whether there are some other connectives that can even make their essays more logically and smoothly. This research attracts researchers' attention to reviewing the education method of teaching English connectives.

However, ICE-GB connectives are only a part of connectives, some often used connectives like "for example", "since" are not included. Thus, scholars may further study connectives in a more thorough and scientific way. Furthermore, ICE-GB is an academic corpus. Since the connectives used in an academic papers are not always used in argumentative essays, scholars maybe find another groups of connectives which are often used in argumentative essays in the future.

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