A STUDY ON THE DEVELOPMENTAL CHARACTERISTICS OF ADVERBIAL CONJUNCTS BY CHINESE NON-ENGLISH MAJORS

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ABSTRACT

Based on the Chinese Learner English Corpus, the present study seeks to investigate the developmental characteristics of the use of adverbial conjuncts. And the results show that at different learning stages Non-English majors use all kinds of adverbial conjuncts, but their occurrence frequencies are quite different, the enumerative adverbials are most frequently used, resultative and deductive adverbials come second, transitional adverbials are least used. Chinese learners, especially high school students rely heavily on a small number of adverbial conjuncts, and the use of adverbials lacks diversity. Secondly, the distribution of different semantic categories is roughly the same in the three corpora. In addition, as students learn English more, the use of adverbial conjuncts presents different developmental trends or characteristics, there is an increasing tendency of summative, appositive, contrastive and corroborative adverbials, but the use of resultative and transitional adverbials increases first and then decreases, and it is quite contrary to the use of enumerative adverbials. There is significant difference in the use of adverbial conjuncts between ST2 and ST3, but no significant difference between ST3 and St4.

Keywords: Non- English Learners, Adverbial Conjuncts, Developmental Characteristics.

INTRODUCTION

Discourses are made up of sentences, and sentences become a unified whole by the use of appropriate cohesive devices. Cohesion and coherence is one of the internal indicators of discourse quality, if the discourses cohere well, the sentence relationship will be logically clear, the content will be coherently and smoothly expressed, even though "cohesion is not the sufficient and necessary conditions for the coherence" (Miao Xingwei, 1998, p. 45). For the vast majority of discourses, the realization of coherence needs the help of some cohesive devices. Adverbial Conjuncts which are important cohesive devices contribute to the realization of textual coherence.

1. Literature Review

1.1 Adverbial Conjuncts

1.1.1 Definition of Adverbial Conjuncts

Adverbial Conjuncts are generally defined as words or phrases, that connect the idea in one sentence/ clause with the idea in another. Biber & Finegan (1988) have discussed this set of linking devices as sentence connectors, which conjoin two independent sentences/ clauses and explicitly mark logical relations in discourse. Halliday and Hasan call this set of linking devices as conjunction. "It is a kind of semantic relation which functions as a specification of the way in which what is to follow is systematically connected to what has gone before" (Halliday & Hasan, 1976, p. 227). Biber, Johansson, Leech, Conrad, & Finnegan (2000, pp. 875-892) defined adverbial conjuncts as linking adverbials, which state the speaker or writer's perception of the relationship between two units of discourse and are important devices for creating textual cohesion. This set of linking devices are given different definitions by different researchers, for example, "conjuncts" (Quirk, Greenbaum, Leech, & Svartvil, 1985), "signal words"(Adams, 1989), "discourse conjuncts" or "discourse markers" (Fraser, 1996), "logical connectors", "discourse particles", "discourse operators", "pragmatic expressions", "pragmatic markers" (He Ziran & Ran Rongping, 1999), "adverbial connectors" (Altenberg & Tapper, 1998). In this study, we use the term "adverbial conjuncts".

1.1.2 Function of Adverbial Conjuncts

Adverbial Conjuncts serve a meta-discourse function, that

is to say, adverbial conjuncts do not add anything to the propositional content, and their main function is to make the logical or semantic relations in the writing clear. "People can understand the semantic relations between sentences, or even logically predict the subsequent sentences through the use of Adverbial Conjuncts (Hu Zhuanglin, 1994, p. 92). Meta-discourse function includes what Halliday (1973) called the textual and interpersonal functions of language. According to Halliday (1973), the textual function is "an enabling function, that of creating a text" and that "it is this component that enables the speaker to organize what he is saying in such a way that it makes sense in the context and fulfills its function as a message" (p. 66). Redecker (1990) has pointed out the textual function of Adverbial Conjuncts by saying that an adverbial conjunct is a "linguistic expression that is used to signal the relation of a sentence to the intermediate context with the primary function of bringing to the reader's attention a particular kind of linkage of the upcoming sentence with the intermediate discourse context". As for the interpersonal function, Halliday (1973) has stated that it includes "all that may be understood by the expression of our own personalities and personal feelings on the one hand, and forms of interaction and social interplay with other participants in the communication situation on the other hand" (p. 66). That is to say, the interpersonal function of Adverbial Conjuncts helps the writers or speakers to make their own presence explicit in a text; it also permits them to express their comments, attitudes, and evaluations of propositions and to express the relationship between writers and readers.

1.1.3 Classification of Adverbial Conjuncts

In order to carry out this descriptive study, we need to first develop a framework of Adverbial Conjuncts to ensure the computer concordancing. The framework used in the present research is the convergence of the schemes proposed by Halliday and Hasan (1976), Quirk et al. (1985), Biber et al. (2000). Among those, Quirk et al.'s scheme is used as a template, because perhaps their scheme is the most comprehensive and systematical categorization which seems to quite adequately meet our demand for a taxonomy of items for computer concordancing. The

taxonomy will also include some Adverbial Conjuncts listed by Biber et al. (2000) and Halliday and Hasan (1976), because they examined the same grammatical items as we do in the present research. Moreover, we add a category which is called "corroboration" (Dai et al., 2000). It includes certain attitudinal disjuncts (Quirk et al., 1985) like "actually" , "in fact", "of course" and "indeed" or instance adverbials (Biber et al., 2000) which are said to have a cohesive function of connecting the proposition to the preceding sentence in that they tend to add a new point that strengthens or gives a new turn to the preceding sentence (Granger & Tyson, 1996).

On the whole, the Adverbial Conjuncts we decide to study are a close set of items (146 adverbial conjuncts) that can be listed (as shown in Table 1), with the exception of the category of enumeration/addition. And Adverbial Conjuncts are realized by the following syntactic forms: single adverbs (e.g., anyway, however, nevertheless, so, though, therefore, etc), adverb phrases (e.g., even so, first and foremost, more precisely, etc), prepositional phrases (e.g., by the way, for example, in addition, in conclusion, on the other hand, etc), finite clauses (e.g., that is, that is to say, etc) and non-finite clauses (e.g., to sum up, added to that, to conclude, etc) (Biber et al., 2000, p. 884).

1.2 Previous Studies on Adverbial Conjuncts

Adverbial Conjuncts are difficult and troublesome for learners to master because of its large quantity, more usages and complexity of meanings. So a great many Chinese and foreign scholars have done numerous research on adverbial conjuncts from different perspectives. However, most of the studies seem to be static in nature, even though there are some dynamic studies of the use of Adverbial Conjuncts by language learners in the different learning stages, they were carried out in English or bilingual environment or English majors. Those English learners living in the non-English environment are seldom studied. For example, Crowhurst (1987) used Halliday and Hasan's five categories of cohesion to examine the kinds of cohesive devices used by students at various developmental levels. Specifically, it examined argumentative and narrative prose written by subjects as grades 6, 10 and 12. However, he found no overall

Semantic classification	Functional Classification	Functional classification
Enumeration/ addition	First(ly), second(ly), third(ly), fourth(ly)…, in the first place, in the second place, in the third place, first (second)of all, for one thing…(and) for another (thing), to begin with, next, then, finally, last, lastly, last but not least, likewise, similarly, in the same way, again, also, further, furthermore, moreover, too, what's more, what is more, in addition, besides, additionally, above all, as well, on (the) one hand, on the other hand, first and foremost.	Textual adverbial conjuncts
Summation	Altogether, all in all, in all, in conclusion, in sum, to sum up, in general, generally speaking, generally, on the whole, in short, briefly, so far, in brief, in a word, in one word, generally, in sum.	
Apposition	Namely, that is, that is to say, in other words, thus, for example, for instance, especially, more especially, I mean, be more precise, in particular, particularly.	
Contrast/ Concession	On the other hand, conversely, instead, on the contrary, in contrast, by contrast, in comparison, anyhow, anyway, however, nevertheless, at the same time, even so, yet, in any case, in any event, at any rate, at all events, in spite of that, in spite of this, after all, all the same, notwithstanding, instead of this (that), under any circumstance, needless to say, otherwise, unfortunately.	
Result /Inference	Accordingly, consequently, hence, now, so, therefore, thus, as a consequence, as a result, of course, somehow, (or) else, otherwise, then, in other words, in that (this) case, on account of this (that), as a result of this, for this reason, for this purpose, under the circumstances, eventually, in this (that) way.	
Transition	By the way, meanwhile, meantime, in the meantime, in the meanwhile, well, now.	
Corroboration	Actually, in fact, as a matter of fact, in effect, of course, indeed, apparently, undoubtedly, no doubt, surely, certainly.	Interpersonal adverbial conjuncts

Table 1. English Adverbial Conjuncts Used in the Present Study

tendency for frequency of cohesive devices to increase with grade level. Collocation and the use of synonyms increased with grade level, but Causal Conjunctives and Temporal Conjunctives decreased with grade level. After examining 200 Chinese English majors from year 1 to year 4 in University, Xu Haiming (Xu Haiming, 2001) found that in terms of the use of meta-discourse, there is a decreasing tendency from year 1, through year 2 to year 3; however, there is an increasing tendency from year 3 to year 4.

Considering the inadequacies and limitations mentioned above, the present study attempts to extend the scope of earlier studies on adverbial conjuncts by investigating the use of adverbial conjuncts at three different learning stages, through computer concordance and comparative corpus analysis, we seek to paint a general picture of the developmental trends in the use of adverbial conjuncts by Chinese non-English majors.

Based on the findings of the previous studies, the present study is designed to examine the use of Adverbial Conjuncts in writing by Chinese non-English majors across three learning stages from a developmental perspective. And it aims to be significant both in theory and in practice. In theory, it is intended to enrich the research on the use of Adverbial Conjuncts in L2 writing and promote a better understanding of the role of adverbial conjuncts in writing.

In practice, it aims to reveal the developmental trend in the use of adverbial conjuncts in writing of ESL learners in China and provide insights into the teaching and learning of adverbial conjuncts in English writing.

2. Research Design

2.1 Corpora Used in the Study

The corpora used in the present study are three subcorpora of the Chinese Learner English Corpus (tagged) which was constructed by Gui Shichun at Guangdong University of Foreign Studies and Yang Huizhong at Shanghai Jiaotong University (2003). Chinese Learner English Corpus (CLEC) is one of the most important achievements of CBACLE (Corpus-Based Analysis of Chinese Learner English) project. CBACLE is a financial- aided project of the ninth five-year plan of the National Foundation of Social Sciences. Chinese Learner English Corpus (CLEC) is a 1-million-word corpus of English writing by Chinese students of five proficiency levels (middle school students--ST2; college non-English majors, CET4-ST3; non-English majors, CET6--ST4; junior English majors-ST5; senior English majors--ST6). The subcorpus, ST2, includes pieces of essays written by Middle school students. They deal with topics like A Healthy Diet, The most impressive thing in my life, One day of the Winter Holiday, My Dreams, A Day in my Weekend, My Hometown, A small Shop, My Family. They are regarded as

representatives of the general population of Middle school students. The total number of words in ST2 is 208088. The subcorpus, ST3, includes 1317 pieces of essays written by non-English major college students in CET-4. These pieces of essays are argumentative essays with an average length of 100 to 300 words in general, they deal with such topics as Getting to Know the World Outside the Campus, Practice Makes Perfect, Health Gains In Developing Countries, Global shortage of Fresh Water, Who is the Best Teacher in the Students' Heart, Social Activities and Our Study. And they are regarded as representatives of the general population of the college English Band 4 learners most of which are sophomores. The total number of words in ST3 is 209043.

The subcorpus, ST4, includes 1135 pieces of essays written by non-English major college students in CET-6. These pieces of essays are also argumentative essays with an average length of 100 to 300 words in general, they deal with such topics as Haste Makes Waste, My View on Job-Hopping, Health Gains in Developing Countries, Global Shortage of Fresh Water, My View on Fake Commodities, The Spring Festival, One Unforgettable Match. They are regarded as representatives of the general population of the college English Band 6 learners most of which are Juniors. The total number of words in ST4 is 212855.

The essays in the three subcorpora are argumentative or exposition in character, i.e. besides presenting facts, they have the aim to explain, analyze and interpret these facts and, usually, to argue for a certain standpoint. Although the titles of essays in the three sub-corpora are not identical, the authors still regard the samples are comparable. The Table 2   is a description of the three corpora.

2.2 Research Questions

On the basis of Quirk (1985)' classification of Adverbial Conjuncts, the present study is to investigate the developmental characteristics of the use of adverbial conjuncts, specifically, the research questions examined in the study are:

	ST2	ST3	ST4
Total number of words	208088	209043	212855
Number of essays	1457	1317	1135
Average length of the essays	143	159	188

Table 2. Description of the Three Corpora

- What are the general situations of the use of Adverbial Conjuncts at three different learning stages and what are the top ten most frequently used Adverbial Conjuncts respectively?

- With the development of English learning, are there any changes in the use of Adverbial Conjuncts and if there are some changes, what are the characteristics and trends of these changes?

2.3 Data Retrieval

Data retrieval goes through four steps. The first step is to extract every instance of each of the 146 Adverbial Conjuncts from the three subcopora (ST2, ST3 and ST4) by applying Wordsmith concordance software which provides raw frequencies of particular words and strings of words and displays these words and phrases with context. The second step is disambiguation. Based on the contextual information, the words that have the same word forms but do not function as Adverbial Conjuncts have to be deleted, and also the Adverbial Conjuncts which have more than one function must be categorized respectively, so that Adverbial Conjuncts for each semantic category, functional category and the overall frequencies of adverbial conjuncts in each subcorpus can be counted correctly. The third step is to calculate the occurrence frequencies of individual adverbial conjuncts that are most frequently used. That is, to calculate the occurrence frequencies of the top ten frequently used Adverbial Conjuncts in the three subcorpora. Fourthly, in describing the possible differences in the use of adverbial conjuncts between each two corpora based on descriptive statistics, tests of significance, namely, the Chi-square Tests with the help of SPSS (Statistical Package for Social Science) to test whether the observed difference is statistically significant, i.e. it is occurring not simply by chance. Such a statistical procedure is essential, as Biber (1995, p. 9; cited in Luo, 2001) points out, "significance tests show how likely it is that quantitative results could have occurred by chance, and thus they should always be reported in research articles describing a corpus- based study".

3. Findings and Discussion

3.1 Overall Features of Non-English Learners' use of Adverbial Conjuncts

Semantic types	ST2		ST3		ST4	
	N	N per 10,000	N	N per 10,000	N	N per 10,000
Enumeration and addition	780	37.5	2088	99.9	1805	84.8
Summation	26	1.3	154	7.4	164	7.7
Apposition	129	6.2	428	20.5	461	21.7
Result/ inference	1163	55.9	1123	53.7	1435	67.4
Contrast/ concession	127	6.1	293	14.0	399	18.7
Transition	33	1.6	22	1.1	32	1.5
Corroboration	113	5.4	168	8.0	183	8.6
Tokens	2371	113.9	4275	204.5	4479	210.4
Types (word form)	60	3	99	4.95	109	5.45

Table 3. Overall Frequencies of Adverbial Conjuncts
in ST2, ST3 and ST4

As it is shown in Table 3, at the three learning stages Chinese non-English students use 11125 Adverbial Conjuncts in all, among which there are 3893 enumerative adverbials, 3721 Resultive or Deductive adverbials and 1018 Appositive Adverbials, there are only 87 Transitional Adverbials are least used. So, at different learning stages students use all kinds of Adverbial Conjuncts, but their occurrence frequencies are quite different, the enumerative adverbials are most frequently used, resultative and deductive adverbials come second, transitional adverbials are least used. There are two reasons for this finding: Firstly, teachers over emphasize the role of adverbial conjuncts in the realization of cohesion and coherence; secondly, in order to show how cohesive and coherent their writing is, some students deliberately mark semantic and logical relationship clearly by using adverbial conjuncts so that it will not be misunderstood, so much so that some students connect some sentences that have no logical relation at all. For example:

> *<ST 3><TITLE Practice Makes Perfect> <SCORE 7> <ID 063830> If you only remember their means, but not practise them, so you have some difficulties when you speak and write sentences or passages.*

In the above example, as it is a conditional sentence with if, there is no need to use the Adverbial Conjunct so.

Seen from the Adverbial Conjuncts used at each learning stage, 2371,4275 and 4479 adverbial conjuncts are used in high school students', CET 4 candidates and CET 6 candidates' English writing respectively. And types of the three corpora are 60,99 and 109. These numbers show that students at different learning stages all use a lot of adverbial conjuncts, as learning stages improve, not only

the number of adverbial conjuncts used is larger and larger, but also the variety is richer and richer. It is possibly because of the facts that as students learn English more, they have a deeper understanding of the important role adverbial conjuncts play in the realization of textual cohesion and coherence, and at the same time, students have acquired more types and a large number of Adverbial Conjuncts.

As shown in Table 3, the distribution of different semantic categories is roughly the same in the three corpora: students of the three different learning stages use categories of result/ inference, enumeration/addition and contrast/concession most frequently to make the relations clear in their English writing. They rarely use adverbial conjuncts of summation/transition. And the categories of apposition and corroboration come between the most frequently used and rarely used adverbial conjuncts, namely, appositive and corroborative adverbial conjuncts are moderately used. The results do not come as a surprise. As Biber et al. (2000) once noted, enumerative/additive adverbials, helping to structure the information in argumentative essays, are used more commonly than other registers; contrastive/ concessive adverbial conjuncts highlight contrasting information, which often lead to main points that the authors want to make in their argumentative essays; result/inference adverbials,marking the conclusions that the writer expects the reader to draw and connect the writer's claim to supporting facts, is the most common category in argumentative essays (cited in Deng, 2003, p. 51). Students' most frequent use of enumerative/additive, contrastive/concessive, result/ inference and appositive adverbials seem to indicate that they have internalized the essence of writing in English.

And at the same time, the statistical data seem to indicate that there is no significant difference in the thought pattern when using adverbial conjuncts to organize texts. There are two reasons for the finding: Firstly, the use of English adverbial conjuncts is influenced by Chinese mode of thinking. Secondly, teachers' and guide books' instruction together with the requirement of timed proposition essays force students to write an essay just like program writing, that is to say, composition writing is to be carried out in

accordance with the so-called three-step procedure, the three steps include bringing out the theme, arguing for your viewpoint and summarizing your points. Taking this phenomenon into consideration, no wonder the use of adverbial conjuncts in the three learning stages are nearly the same as far as categories are concerned.

The authors can also note from Table 3, as students learn English more, the use of adverbial conjuncts present different changing trends and characteristics. Specifically speaking, there is always a sharply increasing tendency from ST2 to ST3 except the categories of result and transition, students in ST2 use more resultative adverbial conjuncts just because they use more "so" than students in ST3 (811 vs. 662) do. As far as the comparison between ST3 and ST4 is concerned, though the changes are various, they are just small changes or no change. So the lines from ST3 to ST4 just go up and down a little or just go evenly. This indicates that students taking part in CET-4 use much more nearly all semantic categories of adverbial conjuncts than students in middle school do, and students taking part in CET-6 use a little more adverbial conjuncts than students taking part in CET-4 do.

On the whole, students of different learning stages use Adverbial Conjuncts differently. In order to test whether these observed differences are statistically significant, Chi-square Tests are carried out with the help of SPSS (Version 11.5). The results are presented as follows:

In social science, $p = 0.05$ is set as the criterion of significance level, when $p<0.05$, the difference is significant, and when $p>0.05$, the difference is not significant. In the comparison between ST2 and ST3, $p = 0.022<0.05$, so the difference in the use of adverbial conjuncts between ST2 and ST3 is statistically significant. It is safe to say CET-4 candidates use more adverbial conjuncts

	ST2 VS. ST3			ST3 VS. ST4		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.674(a)	6	.002	3.736(a)	6	.712
Likelihood Ratio	20.808	6	.002	3.749	6	.711
Linear-by- Linear Association	8.323	1	.004	2.922	1	.087
N of Valid Cases	319			417		

Table 4. Chi-Square Tests for the Comparison Among ST2, ST3 and ST4

than middle school students do after several years' instruction. The significant increase in the use of adverbial conjuncts from ST2 to ST3 is due to the following reasons. Firstly, in a middle school, writing is treated as no more than a handmaid to all other language skills, "a means of reinforcing the acquisition of grammatical and vocabulary knowledge" (Leki, 2002). Both teachers and students in a middle school pay more attention to the lexical and syntactic aspects. When beginning a new unit, on one hand, teachers just teach students the use of important words and structures then translate the text into Chinese, they seldom analyze the text from discourse level, on the other hand, students just memorize the usage of words and structures, they have few opportunities to practice writing, even though they write and hand in their essays, they just get the score and the correction of errors in lexical and syntactic aspects, with no comments on their text structure. Under such guideline in a long run, students will pay little attention to their essays' discourse level, thus they use fewer adverbial conjuncts to link their sentences.

Secondly, for college students, the passing of CET-4 is pre-requisite for their obtainment of Bachelor Degree. So logically speaking, students are highly likely to be driven to memorize more words among which adverbial conjuncts are easy to remember, and to consult a lot of writing handbooks which have a fixed pattern, sometimes called 12 sentence-constructions, in order to do a better job in the test, thus possibly resulting in greater number and variety in Adverbial Conjuncts. However, such test-driven learning may lead to a better test score but not necessarily better proficiency.

Thirdly, during the whole language learning process, students are in continuous growth from low learning stage to high learning stage. After two or three more years' study from middle school to CET-4, the students' holistic proficiency of English language has improved, though there is no systematic training in the use of Adverbial Conjuncts. Undoubtedly, there are some contents concerning this aspect during the whole learning process. So there is an increase both in the tokens and types of Adverbial Conjuncts from ST2 to St3.

No significant differences but similarities in the use of

Adverbial Conjuncts between ST3 and ST4 are found. This result did not come as a surprise. There are also some reasons accounting for this result, first, generally speaking, there are no English classes for Juniors and Seniors in the colleges in China, and the passing of CET-6 is not required so much as CET-4, that is, the non-passing of CET-6 does not affect their obtainment of Bachelor Degree, so students just devote a little time on English study and their English proficiency is staying stagnant or even decreasing, thus causing the non-significant difference between ST3 and ST4.

Secondly, writing strategy adopted by the students in ST3 and ST4 also accounts for the similar amount of adverbial conjuncts. The CET-4 and CET-6 candidates are non-English majors who receive little instruction on English writing, let alone the rhetoric structure and the organization of various types of compositions; therefore, they have no other choices but resort to the tradition of their mother tongue. However, in Chinese, sentences are linked and coherence is achieved through semantic meaning, there are fewer connectives in Chinese than in English. When students translate their thoughts from Chinese into English in writing, they add Adverbial Conjuncts between sentences to show their concern of English conventions in maintaining coherence. Thus, the students of ST3 and ST4 tend to over use adverbial conjuncts.

Thirdly, the writing pattern mastered earlier is very popular and deeply rooted with Chinese non-English major college students. So no wonder there is any significant difference in the use of e adverbial conjuncts between CET-4 candidates and CET- 6 candidates.

3.2 Study on the Individual Adverbials

The top ten English adverbial conjuncts in ST2, ST3 and ST4 are shown in Table 5. For the convenience of comparison, the percentage of the total number of adverbial conjuncts is given.

As indicated in Table 4, firstly, seven of the listed top ten adverbial conjuncts are identical in the three corpora, although their rank order differs a little. This means that students of the three different learning stages rely on roughly the same conjuncts. Secondly, the top ten adverbial conjuncts only account for about one-sixth, one-

ST2	N	%	ST3	N	%	ST4	N	%
So	811	34.2	So	662	17.5	So	882	20.0
Then (inference)	280	11.8	Also	508	11.9	Firstly	387	8.6
Also	260	11.0	First(ly)	365	8.5	Also	350	7.8
Then (enumeration)	220	9.3	Second(ly)	344	8.0	Second(ly)	331	7.4
Too	142	6.0	For example	308	7.2	For example	320	7.1
For example	97	4.1	Then (inference)	196	4.6	Then (enumeration)	208	4.6
In fact	55	2.3	However	118	2.8	Then (inference)	184	4.1
First (ly)	55	2.3	Then(enumeration)	114	2.7	However	154	3.4
However	46	1.9	Third	103	2.4	Third	97	2.2
Of course	38	1.6	Too	102	2.4	Thus	87	1.9
Total	2004	84.5	Total	2820	66.0	Total	3000	67.0

Table 5. Top ten English Adverbial Conjuncts in the Three Corpora

tenth and one-eleventh of the total number of types respectively, but they make up about two-thirds or even more than two-thirds of the total number of tokens used in each corpus. It indicates that students of the three different learning stages all rely heavily on their top ten adverbial conjuncts to achieve the realization of cohesion and coherence, so there comes the problem of monotony in the use of Adverbial Conjuncts by Chinese non-English majors. And as learning stages improve, the problem becomes less serious, that is probably because students have mastered more types and a larger number of adverbial conjuncts, or even more other cohesive devices.

Conclusion

Major Findings

Through corpus based contrastive analysis, it is found that, firstly, at different learning stages students use all kinds of adverbial conjuncts, but their occurrence frequencies are quite different. The enumerative adverbials are most frequently used, resultative and deductive adverbials come second, transitional adverbials are least used. Secondly, Chinese non-English majors tend to rely heavily on a small number of adverbial conjuncts and the richness is not high. Thirdly, the distribution of different semantic categories is roughly the same in the three corpora: students of the three different learning stages use categories of result/inference, enumeration/addition and contrast/concession most frequently. They rarely use adverbial conjuncts of summation/transition. And the

categories of apposition and corroboration are moderately used. Thirdly, as students learn English more, the use of adverbial conjuncts presents different developmental trends or characteristics, there is an increasing tendency of summative, appositive, contrastive and corroborative adverbials, but the use of resultative and transitional adverbials increases first and then decreases, and it is quite contrary to the use of enumerative adverbials. There is significant difference in the use of Adverbial Conjuncts between ST2 and ST3, but no significant difference between ST3 and St4.

Limitations of the Study and Recommendation for Future Study

Like all empirical studies, this study suffered from some limitations though it was designed carefully. On one hand, to a great extent, the present study is a quantitative study, qualitative analysis is not enough, and the erroneous use of adverbial conjuncts is not taken into account. On the other hand, students in the three different learning stages are not the same, and will it influence the research results? All these issues would leave the field open to further fruitful research.

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