



An Investigation of Four Types of Conjunctions in Argumentative Writings among Non-English Major Students

Ci Zhang^{1,a}, Yunfeng Zhang^{2,b} and Xiaoshu Xu^{3,c,*}

¹ Department of Foreign Language Studies, Wenzhou University, China

² Faculty of Language and Translation, Macao Polytechnic University, China

³ Department of Foreign Language Studies, Wenzhou University, China

^a 00061092@wzu.edu.cn, ^c lisaxu@wzu.edu.cn

*corresponding author

Abstract: Motivated by the importance of the pedagogical application of Functional Grammar, and the potential influence of L1 on Chinese English learners' usage of conjunctions in writing discourse, the author aims to find out the frequency and difference between two majors—liberal arts and engineering—have in applying four types of conjunctions, namely additive, causal, adversative and conclusive to their writings as well as the most frequent words they use and regular mistakes they make when using these conjunction words and phrases. The results show that compared to additive and causal conjunctions, students use markedly fewer adversative conjunctions. In addition, liberal arts students use a lot more additive, adversative and causal conjunctions than engineer students while engineer students have the advantage of applying conclusive conjunctions more often. While some of them misuse certain additive conjunctions, adversative conjunctions and conclusive conjunctions, others lack the use of additive conjunctions to make their writings logical and cohesive. This study analyzes the application of conjunctions in students' writing and gives hints to teachers about teaching grammar and writing skills.

Keywords: Four types of conjunctions, Argumentative writing, Non-English major students

1. Introduction

Halliday's (2013) Functional Grammar explains the rudiments of words, phrases, clauses formation from a lexicogrammatical perspective. According to this system, there are three metafunctions: textual metafunction concerning information structure, interpersonal metafunction about interpersonal idea exchange and ideational metafunction about personal experience and view of the world. Among them, textual metafunction develops a set of lexicogrammatical system that makes transcending the boundaries of the clause possible. This is called cohesion. Conjunction, as one way to achieve cohesion, plays a significant role in producing an integral discourse, be it written or spoken. Since conjunction is an important factor in evaluating the discourse, whether there are proper applications of conjunctions in students' writing is worth analyzing. This paper collects college students' writings as samples to analyze the features of conjunction usage and provides insights into writing instructions for non-English major students in the future.

2. Literature Review

Generally speaking, Halliday categorized conjunctions into three main types: elaborating, extending and enhancing with their sub-types ranging from appositive to causal-conditional. While Halliday's grammar is a text grammar in which the choices are examined about how the text comes to be as a result of choices made from predetermined systems, discourse grammars are more process-oriented and are interested in any individual interactional factors that may influence moment-by-moment choices in context (Downing and Locke, 1992). In other words, as opposed to sentence grammar, discourse grammar "foregrounds the kinds of choices that speakers and writers routinely deal with in production—that is, how can one best formulate a message to make it clear, coherent, relevant, appropriately organized" (Mccarthy and Hughes, 1998). As Dijk (1980) also maintained discourse is language examples produced out of communication action, producers of language (writer or speaker) who have a mastery of grammar on the discourse level can be better understood by different groups of receivers (reader or listener). Cohesion, as an area of language in which grammar and discourse are remarkably integrated, contains main patterns such as reference, lexical cohesion, conjunction, substitution and ellipsis, among which

© The Author(s) 2024

Q. Zhang (ed.), *Proceedings of the Pacific-Rim Objective Measurement Symposium (PROMS 2023)*, Atlantis Highlights in Social Sciences, Education and Humanities 23, https://doi.org/10.2991/978-94-6463-494-5_29

conjunction is to join phrases, clauses or sections of a text in such a way that they express the 'logical-semantic' relationship between (Paltridge, 2012). Martin (1992, 2007) grouped conjunction slightly different from Halliday as into the following types: additive, comparative, temporal and consequential conjunctions.

As an EFL teacher, it is essential to enrich the knowledge about discourse grammar for the role it could serve in the field of language pedagogy and assessment because conjunction (Conjunctive adverbials or linking adverbials) serves a connective function and make the relationship between two units of discourse explicit (Biber, et al., 1999). Previous research demonstrated that second-language learners of English have a tendency to overuse, underuse or misuse conjunctions in second-language writing (Milton and Tsang, 1993; Bolton, et al. 2002; Chen, 2006). And studies about Chinese learners in particular showed that that Chinese undergraduate learners of English fail to construct logical and cohesive discourse, because they are found to have inadequate knowledge of logical connectors (Zhang, 2000). According to Chen (2006), even MA TESOL students' writing were found to have an overuse of conjunctions. Since Chinese and English, as two language systems, have a difference in whether to use conjunctions for a smooth description of ideas, language researchers in China found it practical to apply Halliday's views to enhance students' and teachers' awareness of conjunction learning and teaching to some degree. For practical purposes, the author decided to put 60 freshmen writings under the topic of Meaning of Harmony into analysis. The argumentative written samples include both liberal art's students (30) and engineering students (30) seem to be a good choice as it may discover not only a writing pattern by using conjunctions among college freshmen but also different writing habits by using conjunctions between the two majors. A justification for that is, as Chinese English learners, they ignore applying some conjunctions to English writing while mistakenly using other conjunctions because there are no obvious requirements for using conjunctions in Chinese language system. To put it another way, most linguists believed Chinese is more parataxis, which means sentences are placed one by one loosely while English is more hypotaxis, marking coordination between clauses explicitly (Song Zhiping, 2003). As a result, even by the teacher's repetitive instructions of conjunction application in writings in class, students can hardly remember the rules or make good use of proper conjunctions in their production of English written discourse. Furthermore, due to different grammatical features these students apply to their writings (a previous research done by the author using the same data set)--students in liberal arts prefer to write sentences with relatively richer structure but students in engineering have better performance in grammatical accuracy partly because they use simple or even repetitive sentence structure--their way of using conjunction may also differentiate. As is discussed above, the author believes that the analysis of conjunction usage for students' writings can be applied to college students' learning and college teachers' teaching. Students could raise their awareness of employing conjunctions to writing or even choose more varieties of conjunctions to enrich their text description. Meanwhile this will give teachers more space to consider, even by correspondence with students' major difference, a combination of explicit discourse analysis in class and writing practice based on reading after class. The conjunction analysis includes 4 different types of conjunctions: causal from causal conditional sub-type of conjunction, additive, adversative and conclusive.

3. Research Questions

Motivated by the importance of the pedagogical application of Functional Grammar, and the potential influence of L1 on Chinese English learners' usage of conjunctions in writing discourse, the author is inclined to do a brief investigation and analysis on the following two questions.

1. How often do non-English majors apply the four types of conjunctions, namely additive, causal, adversative and conclusive, to their writings? Is there any difference between liberal arts students and engineering students?

2. What words and phrases do they use most and are there regular mistakes when using these conjunction words and phrases?

4. Method

4.1 Procedures and data analysis

The text analysis includes two sections: quantitative analysis of different conjunction usages among all students as well as between two majors; qualitative analysis of some mistakes students tend to make by using these four conjunctions. The quantitative analysis among all students will try to give data in the aspect of times, of conjunction occurrence, conjunction usage frequency per writing, number of students who use the conjunction and the amount they take up in all samples. Meanwhile, the data given to compare the two majors includes the most frequent words or phrases and their number of occurrences from both groups. As referring to qualitative analysis, the author focuses on examples of mistakenly used words and phrases that take place often in students' writings. All the data were given based on both machine correction and two rater's assessments. Excel will be used to analyze the descriptive data and results will be explained descriptively.

4.2 Participants

The participants are 60 freshmen randomly selected at Wenzhou University, China. Half of them are from liberal arts and the other half from engineering with 28 girls and 32 boys. Wenzhou University regularly distributes freshmen students into three levels like Level A, Level B and Level C according to their English scores of the university entrance examination. These students in the author's class are all Level B students, which means they are on the same English proficiency level. These students were required to complete a writing based on the topic of Meaning of Harmony with a length of 150 words after class. They performed writing on an online writing platform which gives feedback in terms of obvious grammatical errors, vocabulary diversity and cohesion as a whole. Therefore, some of them may conduct the writing task more than once to gain a better outcome. Since detailed instructions were not supplied until the author corrected students' final production, students would not be told how to improve cohesion and what conjunctions exactly were mistakenly used. As a result, on one hand, students have the consciousness to improve their cohesion; on the other hand, they do not know how to do it effectively.

5. Results and Discussion

5.1 Results and discussion from data analysis

The following table shows the number of occurrence of additive, adversative, causal and conclusive words and phrases, using frequencies of each type of conjunction per writing, students' number of using conjunctions, and the amount these students account for among all participants.

Table 1: 4 types of conjunctions usage among 60 writings.

Conjunction type	Liberal Arts (30)				Engineering (30)			
	Number of occurrences	Frequency per writing	Students' number of using	Percent in all	Number of occurrences	Frequency per writing	Students' number of using	Percent in all
Additive	70	2.33	28	93.3%	51	1.7	25	83.3%
Adversative	53	1.77	28	93.3%	35	1.17	26	86.7%
Causal	63	2.1	21	70%	46	1.53	17	56.7%
Conclusive	17	0.6	17	60%	23	0.77	23	76.7%

According to what is demonstrated above, the author finds out a different usage tendency among different types of

conjunctions. Compared to additive and causal conjunctions, students use markedly fewer adversative conjunctions. Moreover, students make use of the fewest conclusive conjunctions. As Lee (2004) mentioned in her study, although the NNS group used conjunctions more than twice as often as the NSs, NNS's used far fewer types of conjunctions than the NS's. Moreover, she stated lower proficiency group heavily depends on the use of additive conjunctions in their writing. This seems to explain the result of this study that why students use additive the most. It means they have a certain grasp of conjunction usage in writing so that certain kinds of conjunctions have been applied to make the discourse more cohesive. However, being freshmen, they are not that good at applying various conjunctions as shown from the whole data. For the least usage of adversative conjunction, the author considers two reasons. It is because students possibly do not know how to use conjunction properly and accurately when it comes to the discourse of making different standpoints of view or they neglect the transition of ideas in argumentative writing which means they are not critical enough.

By comparing the two majors, the data shows that liberal arts students use a lot more additive, adversative and causal conjunctions than engineer students while engineer students have the advantage of applying conclusive conjunctions more often. It probably explains engineering students who have a stronger consciousness of generalization are more likely to use conclusive as the writing comes to an end. On the other hand, liberal arts students are more conscious to use cause-and-effect conditions, to add new ideas and have more concerns about how to complete good writing. From this, we can conclude that first-year liberal arts students are more aware of using conjunctions than engineering students in writing discourse.

Next, the author focuses on the findings of the top 3 frequently used words and phrases of these four types separately between two different majors.

Table 2: Top 3 most frequently used conjunctions.

Additive	Additive1	frequency	Additive2	frequency	Additive 3	frequency
Liberal arts	And	23	Moreover	17	In addition	9
Engineer	And	21	Moreover	14	Besides	6
Adversative	Adversative1	frequency	Adversative2	frequency	Adersative3	frequency
Liberal arts	But	13	However	14	Although	6
Engineer	But	15	Although	5	Even if	3
Causal	Causal 1	frequency	Causal 2	frequency	Causal 3	frequency
Liberal arts	Because	19	Therefore	13	So that	9
Engineer	Because	12	Because of	8	Therefore	7
Conclusive	Conclusive1	frequency	Conclusive 2	frequency	Conclusive 3	frequency
Liberal arts	In brief	8	All in all	5	In conclusion	2
Engineer	In brief	12	In a word	5	All in all	3

The reason for doing the summary above is because the author found surprisingly some patterns of conjunctions among these four types are repeated with high frequency, which is an interesting discovery. It is because of the simple use of repetitive patterns of conjunction that the expressions are not diversified at all. For example, "but" and "although" are used separately 28 and 11 times in all 60 students among 88 times using all adversative conjunctions as a whole. It is to say these two words take up nearly half of the adversative expression in students' writings. So do "and" and "moreover", "because" and "therefore". More surprisingly, the phrase "in brief" takes up exactly half of all times of conclusive conjunction usages, which is really in brief of expression by using two single words. Those conjunctions with three words such as "all in all" or "in a word", which are supposed to be frequently used words in Chinese students' writings, are rarely used. The same situation goes in using "because" and "therefore" rather than "so" or "thus", using "moreover" rather than "what's more" or "furthermore". It seems that students are taught to use these expressions prior to other expressions and they try to remember only a few expressions under the same category of conjunction. Still, we can see differences between majors occur when it comes to the second frequently used and third frequently used conjunctions in

the types of adversative, causal and conclusive conjunctions. Despite these slight differences, the overall choice of words and phrases has a high degree of similarity.

5.2 Results and discussion of mistakes

The author, in order to not only find out the frequent patterns students use in terms of conjunction but also explore students' mistakenly used conjunctions, would illustrate students writing mistakes of four conjunctions types in the following two aspects:

Misuse

When students intend to list several examples of harmonious relations, or when they add more persuasive points to make emphasis of the importance of harmony, they usually use additive conjunctions. Although "and", "moreover" can be easily applied without making mistakes, some of them tend to use other expressions like "not only..but also". But not only one of them makes the sentence wrongly by either writing "Harmony only not means the state of being together but also means good communication" or writing "This is not only the reason for getting well with each other, but also leave a good impression on others' mind". When the sentence becomes longer, more grammatical errors emerge. Additionally, students use "besides" as a word to express the information added and how equal importance of the ideas. However, they did not understand that "besides" has a less formal use than "in addition" (Field, 1994). It seems to be a widespread problem for Chinese English learners because many studies (e.g., Chen, 2006; Field & Yip, 1992; Lei, 2012; Zhang, 2000) note Chinese and Hong Kong NNS writers' misuse of besides. Another example from students' usage of adversative conjunction is that a few students still transfer their L1 by writing "although...but". The same situation comes out when applying causal conjunction "because", they are likely to write sentences with "because...so...". Though these are so apparent mistakes that college students, if careful enough, would not make, they are largely influenced by Chinese language structure. As referring to conclusive conjunction, some students use "as far as I'm concerned" or "in my opinion" to end up their writing". It seems they don't quite understand to mark the conclusion by using conclusive conjunction. One of them even uses "Sure, people can live in harmony with nature by hard work and new technology", which is grammatically wrong.

Lack of use

Additionally, students are inclined to make sentences without conjunctions where conjunctions should be applied. This is more likely to occur among engineering majors since they are not as good at using conjunctions as liberal arts students. "Harmony could be found in the house, could be seen in the workplace" is an example of not happening occasionally. So do the sentence "Harmony is the foundation stone of beauty. Harmony is a rose in the garden" and "Harmony can be seen in school. Students get along happily. Teachers and students have a good relationship". These sentences are all grammatically right. The only problem is they lack logic and semantic cohesion. Even the simplest additive conjunction like "and" can be added to make it more appropriate. They surely know the word "and", however, some of them are not aware of putting sentences in an organized way or they may be afraid of wrong usages so students would rather avoid using them. Anyhow, lack of use is another obvious mistake that students often make.

6. Conclusion

To sum up, freshmen in the author's university have a certain mastery of these four conjunction types--additive, adversative, causative and consequential. They have the consciousness to apply all of them to their argumentative writings, although the patterns they use are almost similar. On one hand, the diverse usage of conjunctions is surely a hard job for them. It may be limited to their analysis and practice of written discourse. On the other hand, even by applying the most

frequently used conjunctions, they tend to make two major mistakes. By mistakenly using conjunctions, it means L1 influence as well as the misconception of discourse formality (misuse of besides). This article brings about the status quo of English writing among non-English major freshmen through investigation and analysis. Further discussion about the way of teaching and learning conjunctions from a discourse perspective should be carried out accordingly.

7. Reference

- 1 . Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. London: Longman.
- 2 . Bolton, K., Nelson, G. & Hung, J. (2002). A corpus-based study of connectors in student writing: Research from the international corpus of English in Hong Kong (ICE-HK). *International Journal of Corpus Linguistics*, 7(2), 165-182.
- 3 . Chen, C. W. (2006). The use of conjunctive adverbials in the academic papers of advanced Taiwanese EFL learners. *International Journal of Corpus Linguistics*, 11, 330-345.
- 4 . Downing, A., & Locke, P. (1992). *A university course in English grammar*. London: Prentice Hall.
- 5 . Halliday, M.A.K. (2013). *Halliday's Introduction to Functional Grammar*. Routledge. London and New York.
- 6 . Field, Y., & Yip, L. M. O. (1992). A comparison of internal cohesive conjunction in the English essay writing of Cantonese speakers and native speakers of English. *RELC Journal*, 23(1), 15-28.
- 7 . Field, Y.(1994). Cohesive conjunctions in the English writing of Cantonese speaking students from Hong Kong. *Australian Review of Applied Linguistics* 17:1, 125-139.
- 8 . Lee, E. (2004). A corpus-based analysis of the Korean EFL learners' use of conjunctive adverbials. *English Teaching*, 59(4), 283-301.
- 9 . Lei, L. (2012). Linking adverbials in academic writing on applied linguistics by Chinese doctoral students. *Journal of English for Academic Purposes*, 11, 267-275.
- 10 . Martin, J.R. (1992). *English Text. System and Structure*. Amsterdam: John Benjamins.
- 11 . Martin, J.R. and Rose, D. (2007). *Working with Discourse: Meaning Beyond the Clause* (2nd edn). London: Continuum.
- 12 . Mccarthey, M. & Hughes, B. (1998). From sentence to discourse: discourse grammar and English language teaching. *Tesol Quarterly*, 31(2), 263-287.
- 13 . Milton, J., & Tsang, E. (1993). A corpus-based study of logical connectors in EFL students and writing: Directions for future research. In R. Remberton & E. Tsang (Eds.), *Studies in lexis* (pp. 215-246). Hong Kong: The Hong Kong University of Science and Technology.
- 14 . Paltridge, B. (2012). *Discourse Analysis. An introduction*. (2nd edn). London: Bloomsbury.
- 15 . Song,Zhiping.(2003). YingHanYuXingHeYuYiHeDuiBiYanJiu (Parataxis and hypotaxis research on Chinese and English). *Journal of Northeast Normal University*, 2, 93-98. DOI: 10.16164/J.cnki.22-1062/c.2003.02.014
- 16 . Van Dijk. T. A. (1980). The Semantics and Pragmatics of Functional Coherence in Discourse. *Journal of Pragmatics* 4: 233-252.
- 17 . Wei, Y.(2014).DaXueYingYuXieZuoZhongLianJieCiShiYongTiaoChaYuFenXi(Investigation and analysis of conjunctions in college English writing). *Journal of Kaifeng College*, 34(10),133-134.
- 18 . Zhang, M. (2000). Cohesive features in the expository writing of undergraduates in two Chinese universities. *RELC Journal*, 31, 61-95.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

