

# **Copyright Undertaking**

This thesis is protected by copyright, with all rights reserved.

### By reading and using the thesis, the reader understands and agrees to the following terms:

- 1. The reader will abide by the rules and legal ordinances governing copyright regarding the use of the thesis.
- 2. The reader will use the thesis for the purpose of research or private study only and not for distribution or further reproduction or any other purpose.
- 3. The reader agrees to indemnify and hold the University harmless from and against any loss, damage, cost, liability or expenses arising from copyright infringement or unauthorized usage.

#### **IMPORTANT**

If you have reasons to believe that any materials in this thesis are deemed not suitable to be distributed in this form, or a copyright owner having difficulty with the material being included in our database, please contact <a href="mailto:lbsys@polyu.edu.hk">lbsys@polyu.edu.hk</a> providing details. The Library will look into your claim and consider taking remedial action upon receipt of the written requests.

This thesis in electronic version is provided to the Library by the author. In the case where its contents is different from the printed version, the printed version shall prevail.

# ADVERSATIVE AND CONCESSIVE CONJUNCTIONS IN CHINESE EFL WRITING: A FUNCTIONAL PERSPECTIVE

# **ZHANG YAN**

Ph.D

The Hong Kong Polytechnic University

2014

# The Hong Kong Polytechnic University Department of English

# Adversative and Concessive Conjunctions in Chinese EFL Writing: A Functional Perspective

# **ZHANG YAN**

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

# **CERTIFICATE OF ORIGINALITY**

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it reproduces no material previously published or written, nor material that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

(Signed)

ZHANG Yan (Name of Student)

# **Dedication**

This thesis is dedicated to my beloved late mother-in-law.

I wish I could have spent more time with her while she was suffering from cancer.

I deeply regret that she did not live to see the completion of the thesis.

#### **Abstract**

This dissertation is a comparative study of adversative and concessive conjunctions in English texts written by Chinese EFL learners and the native-speaker writers, who are comparable in age and educational stage. Adversative and concessive conjunctions are expressions that indicate semantic relations of contrast and concession between text spans of varying extent. Informed by Halliday and Matthiessen's (2004) systemic account of clause complexing and CONJUNCTION, adversative and concessive conjunctions fall into two broad syntactic categories, i.e. structural conjunctions that link or bind clauses within the domain of a single clause complex (e.g. but, although, etc.) and cohesive conjunctions that typically mark relations beyond the clause complex (e.g. however, nevertheless, etc.). In view of the meaning relations, these conjunctions represent two different semantic categories, i.e. adversative type of extension and concessive type of enhancement. Very often, an adversative or concessive conjunction can be used with a great deal of semantic overlap between these two types of expansion. That is, the same instance of a conjunction in a text may be interpretable both adversatively and concessively. The indeterminacy between contrast and concession has been discussed in the literature on grammaticalization. For instance, Ramat and Mauri (2008) argues that "the diachronic paths attested for adversative and concessive connectives partially overlap as far as originally temporal values are concerned, but tend to diverge in the remaining cases" (p. 5).

Given the complex nature of adversative and concessive conjunctions at the syntactic and semantic levels, these conjunctions have been a source of difficulty for EFL learners in writing. The aims of this dissertation are to investigate the syntactic and semantic categories of adversative and concessive conjunctions, and to explore the discourse functions of these conjunctions in writing of Chinese EFL learners and native speakers. Drawing on Halliday and Matthiessen's (2004) notion of grammar as a meaning-making resource, this dissertation is oriented towards uncovering the

meaning distinctions between a group of adversative and concessive conjunctions instantiated in English texts written by Chinese EFL learners in comparison with those written by their native-speaker counterparts.

Motivated by the concern with probability profiles and systemic potentials of adversative and concessive conjunctions, the study combines the strengths of two research methods, i.e. the corpus-based approach and text-based analysis along the lines suggested by Matthiessen (2006). The corpus-based approach makes it possible to analyze a group of conjunctions in large data sets in quantitative terms of certain low-level lexicogrammatical features such as syntactic positions and co-occurrence patterns. However, analysis involving text-level features is difficult to handle with this approach; these features have to be explored in full-length texts manually. As discussed in Matthiessen (2006), in light of the expected difficulty of analyzing a large volume of data manually, the usual practice is to have a trade-off between low-level analysis of large-volume data and high-level analysis of small-volume data.

The present study draws on a learner corpus and a native-speaker corpus. The learner data is taken from the Chinese Learner English Corpus (CLEC) (Gui & Yang, 2003) and the native-speaker data is based on essays from British Academic Written English Corpus (BAWE-E), a corpus of proficient student writing for degree programmes at UK tertiary institutions (Nesi &Thompson, 2007). The corpus-based analysis starts with an overview of a total number of seventeen adversative and concessive conjunctions across the two corpora. Comparisons are made in three major areas: i) overall frequency and distribution of the types of inter-dependency between clauses, namely structural and cohesive; ii) distribution of semantic categories, i.e. adversative, replacive and concessive and iii) positional distributions, such as clause-initial and clause-medial positions concerning cohesive conjunctions and initial and final dependent clauses concerning the subordinating (hypotactic) type of structural conjunctions. Following the overview of a group of 17 conjunctions, the next step of

the corpus-based analysis is devoted to the detailed study of four specific conjunctions, namely *but*, *while*, *however* and *on the contrary*. The in-depth study focuses on the syntactic and co-occurrence patterns of these conjunctions in order to shed light on the specific type of semantic relations they encode.

The text-level analysis is based on a full-length text taken from the Chinese Learner English Corpus. Text-level analysis is of particular importance in accounting for the discourse properties of adversative and concessive conjunctions used in Chinese EFL learners' writing. Specifically, it is concerned with searching for discursive evidence as to why and how adversative and concessive conjunctions are used in relation to other linguistic choices instantiated in English texts written by Chinese EFL learners.

Finally, based on the findings from the corpus-based analysis and the text-based analysis, pedagogical implications are drawn. The pedagogical implications take into account both features of text and variables of context, with an aim to systemize EFL writers' linguistic choices of adversative and concessive conjunctions in relation to context. The perspective to EFL writing adopted in this dissertation is in line with the multi-perspective second language writing theory suggested by Silva and Matsuda (2001). Silva and Matsuda (2001), in the introduction of *Landmark Essays on Second Language Writing*, emphasize the need for a theory of second language writing that considers various elements of second language writing — including the writer, the text, and the context, as well as the interaction of these elements.

It is hoped that the present study of adversative and concessive conjunctions will not only contribute to our understanding of these conjunctions in terms of the meanings created, but also to our understanding of the systemic potential of clause complexing and CONJUNCTION as complementary grammatical resources for realizing semantic relations, and ultimately to our knowledge of grammar as a meaning-making resource. To our knowledge, this study is among the first to adopt a corpus-based Systemic

Functional Linguistics perspective in investigating the semantic relations encoded by adversative and concessive conjunctions in EFL writing.

# Acknowledgements

First and foremost, I would like to express my deepest gratitude to Dr. Li Lan, my supervisor, for her insightful supervision and boundless support for my Ph.D. study. Without her support, this work could not have been completed. Thank you Dr. Li for your professionalism and confidence in me.

I am deeply indebted to Prof. Christian Matthiessen for the guidance he provided throughout the process of my thesis writing and for the detailed comments and suggestions he made on the manuscript that I submitted for internal examination. The works of Prof. Matthiessen in the field of systemic functional linguistics provide the biggest inspiration for the thesis and have had such a profound impact on me that my views of English grammar have changed considerably. I would also like to thank my internal examiner, Dr. Xu Xunfeng for his kindness and professionalism.

I would like to thank my external examiners, Prof. Douglas Biber and Prof. Tan Zaixi, distinguished scholars in the fields of corpus linguistics and translation studies, respectively. I am honored and lucky to have both of them on my thesis committee. I am very grateful to them for the constructive comments they provided on the thesis.

My sincere thanks goes to Prof. Geoff Williams, Prof. James Martin, Prof. Lourdes Ortega and Dr. Susan Hood for offering me insightful comments during the consultation sessions I had at PolyU.

I would like to thank all the teachers of the English Department at PolyU who made the department a friendly and professional environment for working.

In addition, I would like to thank a group of specialists in the field of second language writing, especially Dr. You Xiaoye, Dr. Dwight Atkinson, Dr. Cheung Yinlin and Prof.

Paul Kei Matsuda for their hospitality extended to me during my visits to Spain, Taiwan and the United States for second language writing conferences. These academic trips constitute the most enjoyable and unforgettable experience of my Ph.D. study.

Next, I would like to thank my best friends, including Dr. Zhang Li, Dr. Maggie Liu Min, Dr. Zhang Xiaochun, Prof. Gao Xiang, Dr. Wei Yaozhang, Ms. Xu Ni, Ms. Zhang Mei and Ms. Su Yan. I offer my enduring gratitude for their true friendship and support over the years.

My warmest thanks goes to my first-love-turned husband in Shanghai — Zhao Hui, who has been waiting for me for so many years. Without his encouragement and support, it would not have been possible for me to realize my dream. Thanks and love also goes to my family in Yangzhou — my most affectionate parents for providing me with a loving home, teaching me the values of life and being the reason for my happiness, my sweet elder sister for starting my interest in English and my lovely nephew for amusing me while I was getting depressed about my mother-in-law's disease and the progress of my dissertation.

My sincre appreciation goes to all of you. Thank you for making my life so beautiful.

# **Table of Contents**

Abstract	iii
Acknowledgements	vii
List of Tables	xii
List of Figures	xiv
Chapter 1 Introduction	3
1.5 Organization of dissertation	9
Chapter 2 Literature Review	nction
2.1.1 Traditional descriptions of conjunctions and linking adverbials	11
2.2 Further discussion on adversative, replacive and concessive relations	
basic distinctions	
2.2.2 Semantic opposition, denial-of-expectation and correction	
2.2.3 Comparing different classifications	
2.3 Empirical studies on the use of conjunctions and linking adverbials in	
writing	56
Chapter 3 Methodology	60
3.1 Data Description	
3.1.1 Learner corpus used: CLEC	
3.1.2 Native-speaker corpus used: BAWE-E	
3.2.3 Compatibility between CLEC and BAWE-E	
Chapter 4 An Overview of Adversative and Concessive Conjunctions in and PAWE E	
and BAWE-E4.1 Overall frequency and distributions of inter-dependency types	
4.2 Distribution of semantic categories	
4.3 A complementary view: circumstantial augmentation vs. clause comp	
and conjunction	U
4.4 Syntagtic digtribution	00

4.4.1 Syntactic distribution of structural conjunctions	100
4.4.2 Syntactic distribution of cohesive conjunctions	109
4.5 Analyzing multivalent conjunctions	113
Chapter 5 Co-occurrence Patterns of but in CLEC and BAWE-E	120
5.1 An overview of the co-occurrence patterns of but in CLEC and BA	
5.2 Analysis of but in fact	
5.2.1 Sentence-initial <i>but</i> co-occurring with <i>in fact</i> in CLEC	
5.2.2 Sentence-initial <i>but</i> co-occurring with <i>in fact</i> in BAWE-E	
5.2.3 Co-occurrence of <i>but in fact</i> within clause complex in BAWE-E	
5.2.4 Co-occurrence of <i>but in fact</i> within clause complex in CLEC	
5.3 Analysis of but I think	
5.3.1 Functions of <i>but I think</i> in CLEC	
5.3.2 Functions of <i>but I think</i> in BAWE-E	
5.4 Summary	157
Chapter 6 The Positioning of while-clauses and the Implications	s for
Understanding the Types of Logico-semantic Relations of while acros	s the
Corpora	
6.1 Sequences of while-clause and the main clause in a hypotactic nexus	159
6.1.1 Conjunctive Adjuncts+ while-clauses	164
6.1.2 that-while-clauses	172
6.1.3 Section summary	180
6.2 Comparing initial and final while-clauses for different meanings in	CLEC
and BAWE-E	182
6.2.1 Quantitative findings of initial and final while-clauses of for different	
meanings	182
6.2.2 Initial while-clauses for the adversative sense	185
6.2.3 Initial while-clauses for concession	188
6.2.4 Final while-clauses	195
6.2.5 Section Summary	197
6.3 Further evidence of the distinction between adversative and conc	essive
sense of while	198
6.3.1 Subject in while-clauses containing may: a quantitative description	200
6.3.2 Relation of Subject selection to modality in while-clauses	204
Chapter 7 Analysis of <i>however</i> : Clause Position and Its Implications	211
7.1 Positional distribution of <i>however</i> in CLEC and BAWE-E	
7.2 Analysis of clause-initial however	
7.2.1 Clause-initial <i>however</i> for adversative extension	
7.2.2 Clause-initial <i>however</i> used for concessive enhancement	
7.2.3 Summary of the functions of clause-initial <i>however</i>	
7.3 Analysis of clause-medial and paratactic however	
7.3.1 Functions of post-subject <i>however</i>	
7.3.2 Functions of <i>however</i> after an initial circumstantial Adjunct	

7.3.3 The paratactic use of <i>however</i>	.236
7.4 Analysis of clause-final however	.239
Chapter 8 Distinguishing between Two Functional Types of on the contrary:	The
Application of Thematic Analysis	
8.1 Descriptions of on the contrary in the literature	
8.2 Quantitative evidence of two functional types of <i>on the contrary</i>	
8.3 Descriptive framework for analyzing two functional types of <i>on</i>	
contrary	
8.3.1 The replacive type	
8.3.2 The adversative type	
8.4 Further evidence of the functional distinctions of <i>on the contrary</i>	
8.4.1 Clause-initial <i>on the contrary</i>	
8.4.2 Non-clause-initial <i>on the contrary</i>	
8.5 Summary	
-	
Chapter 9 Text-based Analysis of Adversative and Concessive Conjunctions	
9.1 An overview of the text-based analysis	
9.2 Thematic interpretation	
9.4 Rhetorical structure analysis	
9.5 Summary	
•	
Chapter 10 Conclusion	
10.1 Summary of findings	
10.2 Suggestions for future research	.299
Appendices	.301
Appendix 1 The error tagging scheme of Chinese Learner English Co	
(Gui & Yang, 2003)	_
Appendix 2 Logico-semantic annotation of while-clauses in BAWE-E	and
CLEC	.304
Appendix 2.1 Initial while-clauses in BAWE-E (Sample=100)	
Appendix 2.2 Initial while-clauses in CLEC (Sample=100)	.311
Appendix 2.3 Final while-clauses in BAWE-E (Sample=100)	
Appendix 2.4 Final while-clauses in CLEC (Sample=100)	.324
References	329

# **List of Tables**

Table 2.1 Biber et al.'s (1999) classification of linking adverbials (pp. 875-879)15
Table 2.2 Descriptions of paratactic and hypotactic elaboration in Halliday and
Matthiessen (2004, pp. 396-405)
Table 2.3 Categories of extension and principal markers (Halliday & Matthiessen,
2004, p. 405)
Table 2.4 The concessive type of enhancement and the principal markers (Halliday &
Matthiessen, 2004, p. 412)35
Table 2.5 Classification of adversative relations (Halliday & Hasan, 1976, p. 255)38
Table 2.6 Comparisons of treatment of conjunctions and conjunctive Adjuncts by
Biber et al. (1999) and Halliday and Matthiessen (2004)
Table 2.7 Biber et al.'s (1999) classification of linking adverbials compared to
Halliday and Matthiessen (2004)
Table 2.8 Summary of relations of contrast in Mann and Thompson (1988) and
Halliday and Matthiessen (2004)54
Table 3.1 Composition of the CLEC corpus
Table 3.2 Classification of error-tags relevant to conjunctions in CLEC64
Table 3.3 Comparisons between CELC and BAWE-E along some key parameters68
Table 3.4 Markers of adversative, replacive and concessive relations (adapted from
Matthiessen, 2002; Halliday and Matthiessen, 2004)73
Table 4.1 Overall frequency and distribution of adversative/replacive/concessive
conjunctions82
Table 4.2 Classification of adversative, replacive, concessive and multivalent
conjunctions89
Table 4.3 Distributions of circumstantial elements of comparison/replacement
/concession91
Table 4.4 Distribution of sentence-initial and non sentence-initial hypotactic
conjunctions in CLEC and BAWE-E (N/million)102
Table 4.5 Top five recurrent patterns of non sentence-initial hypotactic conjunctions in
BAWE-E
Table 4.6 Syntactic distributions of conjunctive Adjuncts
Table 5.1 The 10 most frequent words co-occurring with but in R1 in CLEC and
BAWE-E121
Table 5.2 <i>in</i> -phrases co-occurring with <i>but</i> in CLEC and BAWE-E124
Table 5.3 Words co-occurring with <i>but I</i> in CLEC
Table 5.4 Summary of the analysis of example (18) based on Halliday and
Matthiessen's (2004) lexico-grammatical realizations of modality151
Table 6.1 Positional distribution of <i>while</i> across the corpora160
Table 6.2 Top five co-occurring words of <i>while</i> in L1 position in BAWE-E161
Table 6.3 Distribution of <i>while</i> -clauses in CLEC and BAWE-E

Table 6.4 Distribution of conjunctive Adjuncts preceding while in L1	position in
BAWE-E	164
Table 6.5 Subject realizations in while-clauses containing may	203
Table 7.1 Positional distributions of <i>however</i> in CLEC and BAWE-E	212
Table 7.2 Distributions of clause-medial and paratactic however in CLEC a	and BAWE-
E (N=100)	223
Table 8.1 Frequency of negative polarity associated with on the contrary is	
	246
Table 9.1 The 'Crime' text segmented into clause units	
Table 9.2 Thematic analysis of the 'Crime' text	268
Table 9.3 Clause complexing and conjunction in the 'Crime' text	274
Table 9.4 Analysis of the paratactic nexus linked by but	280
Table 9.5 Analysis of the hypotactic nexus bound by <i>although</i>	281
Table 9.6 Distribution of nucleus-satellite and multi-nucleus relations	290
Table 9.7 Distribution of Presentational and Subject Matter relations	291

# **List of Figures**

Figure 2.1 The location of the clause complex in terms of stratification, metafunction
and rank (Halliday & Matthiessen, 2004, p. 370)
Figure 2.2 The system of CONJUNCTION (Halliday & Matthiessen, 2004, p. 541).39
Figure 3.1 Combined method of corpus-based and text-based analysis
Figure 4.1a Proportional distributions of interdependency types across the corpora84
Figure 4.1b Proportional distributions of interdependency types across the corpora84
Figure 4.2 The distribution of cohesive conjunctions in CLEC and BAWE-E
Figure 4.3 The distribution of hypotactic conjunctions in CLEC and BAWE-E87
Figure 4.4 The probability for conjunctions to realize the adversative, replacive,
concessive and multivalent semantic relations across two corpora
Figure 4.5 Proportional distributions of structural, cohesive and circumstantial
realizations
Figure 4.6 Percentage of adversative, replacive and concessive circumstantial
elements93
Figure 4.7 Analysis of example (2) along the scale of metaphor and cline of
grammatical integration97
Figure 4.8 Concordance lines for non sentence-initial <i>although</i> from BAWE-E 106
Figure 5.1 Concordance lines of <i>but in fact</i> from CLEC
Figure 5. 2 Representation of example (1) as a cohesive sequence126
Figure 5.3 Representation of example (2) as a cohesive sequence
Figure 5.4 Representation of example (3) as a cohesive sequence
Figure 5.5 Concordance lines of <i>but in fact</i> from BAWE-E
Figure 5.6 Concordance lines of <i>but in fact</i> from CLEC
Figure 5.7 Logico-semantic and tactic relations of example (11)
Figure 5.8 Concordance lines of but I think from CLEC
Figure 5.9 Analysis of example (19) as paratactic adversative subtype of extension155
Figure 5.10 Analysis of example (19) as paratactic concessive subtype of
enhancement
Figure 6.1 Structural and cohesive relations in while-clause preceded by a conjunctive
Adjunct
Figure 6.2 Analysis of example (9)
Figure 6.3 Concordance lines of that while from BAWE-E173
Figure 6.4 Concordance lines of argues that while from BAWE-E174
Figure 6.5 Analysis of example (11)
Figure 6.6 Diagrammatical representation of the structural and semantic links of
example (11)
Figure 6.7 Summary of the interconnections between positions of while and positions
of the <i>while</i> -clause
Figure 6.8 Initial while-clauses for different meanings in CLEC and BAWE-E183
Figure 6.9 Final while-clauses for different meanings in CLEC and BAWE-E 184

Figure 6.10 Concordance lines of whilemay in BAWE-E	202
Figure 6.11 Analysis of example (32) in terms of mood structure	206
Figure 6.12 A multifaceted analysis of example (35)	210
Figure 8.1 Analysis of example (4)	251
Figure 8.2 Analysis of example (5)	253
Figure 8.3 Analysis of example (6)	255
Figure 8.4 Concordance lines of non-initial on the contrary	258
Figure 8.5 Concordance lines of non-initial on the contrary preceded by Subject.	259
Figure 9.1 Analysis of internal concession signaled by however in Clause 10	277
Figure 9.2 Analysis of sentence-initial but in Clause 14	278
Figure 9.3 Segmentation of the 'Crime' into text units for RST analysis	285
Figure 9.4 RST analysis of the 'Crime' text	285

# **Chapter 1 Introduction**

This study investigates the use of a set of adversative and concessive conjunctions in English texts written by Chinese EFL learners and native speakers in order to shed light on the problems that Chinese EFL learners may encounter in using these conjunctions<sup>1</sup>. Adopting a corpus-based systemic functional approach, the study is concerned with the systemic potentials of adversative and concessive conjunctions instantiated in a learner corpus and a comparable native-speaker corpus. In the words of Matthiessen (2006, p. 108): '...the systemic potential of a language embodies both the qualitative relationships that make up system networks and the probability of instantiation of terms within systems'. This chapter provides an introduction to the study, including the research background, the main motivations for the present study, research questions and the organization of the thesis.

# 1.1 Research background

Writing in English has always been a demanding task to ESL/EFL learners, as learners have to achieve not only grammatical accuracy at clause level but also semantic unity at text level. However, even learners with syntactic maturity may not be able to produce well-written essays due to limited proficiency in logical organization of texts. As noted by Martin (1992), grammatically correct ESL texts may still violate native-speaker expectations at the discourse level.

-

<sup>&</sup>lt;sup>1</sup> Initially, I had only one central goal, i.e. to describe the grammatical patterns used by Chinese learners of English in comparison with those by native speakers. However, after conducting an overall comparison of quantitative patterns in a corpus of writing by Chinese EFL learners and a corpus of native writer academic writing, I felt that an exploration of syntactic/semantic/discourse patterns for specific conjunctions might help to unveil the quantitative differences and thus turned my attention to patterns of use exclusively found in native writing. Therefore, to reflect the dual purpose of the study, I proposed a new title after the initial submission: "Adversative and concessive conjunctions in English texts written by Chinese EFL learners and native-speakers: A corpus-based systemic functional description". The idea of reconciling the two goals is credited to Prof. Douglas Biber.

Despite the claim made in most course books of writing and evaluation guidelines that discourse unity is one of the major factors that determine the rating of a student essay, the concept has seldom been defined in concrete terms. Faced with an absence of clear guidelines on how to assess discourse unity, some teachers of English writing in China rely on their own intuition of style to assess students' writing, a practice which may further distance Chinese EFL learners from understanding what precisely makes a group of sentences hang together to form a meaningful whole. Others, understanding that discourse unity or coherence lies in the logic connections between sentences, devote great effort to teaching conjunctions. However, teaching conjunctions without considering their functions in a given context may lead to problems of misuse. As Witte and Faigley (1981) pointed out, a cohesive text is not necessarily coherent. In other words, cohesion is determined by "lexically and grammatically overt inter-sentential relationships", while coherence by semantic relationships. A writer can easily construct a text that is cohesive but only minimally coherent (Connor, 1996). The semantic orientation of a text is highlighted by Halliday and Matthiessen (2004): "[a]lthough the organization of text has typically been represented in terms of some form of structural notation, it is important to be able to think of text dynamically, as an ongoing process of meaning" (p. 524).

According to Halliday and Matthiessen (2004), a text is developed or expanded lexicogrammatically by two complementary resources: i) clause complexing; ii) the cohesive system of conjunction. In the words of Halliday and Matthiessen (2004, p. 538), "the resource of clause complexes is used to guide the local development of text... and the clause complex is the most extensive domain of relational organization, whereas the cohesive system of CONJUNCTION has evolved as a complementary resource for creating and interpreting text". It provides the resources for marking logico-semantic relationships that obtain between text spans of varying extent, ranging from clauses within clause complexes to long spans of a paragraph or more. Both clause complexing and the system of CONJUNCTION rely on a range of logico-

semantic relations to develop a text into a meaningful unit. The types of logicosemantic relations based on Halliday and Matthiessen (2004) will be reviewed in Chapter 2, Section 2.1.2.

### 1.2 Motivation: complexity of adversative and concessive conjunctions

Among the semantic relations that hold either between or within clause complexes, the adversative and concessive types are regarded as "the most complex of all semantic relations that may hold between parts of a discourse" (Kortmann 1991, p. 161). Since adversative and concessive relations provide a less expected alternative to what has already been stated, they are typically signaled explicitly with markers such as *yet*, *however*, *but*, *although*, *conversely and on the one hand* ... *on the other hand*, and etc. (cf. Taboada, 2006). However, given the complex nature of adversative and concessive conjunctions, EFL learners may have problems with when and how to signal the contrast with these markers either within or beyond clause complexes. For instance, they may signal a relation of contrast or concession with an adversative or concessive conjunction when readers least expect it from the prior discourse or they may signal the contrast with an inappropriate conjunctive maker. In the discussion below, I will provide an overview of the complexity of adversative and concessive markers at both semantic and syntactic levels, which constitutes the major motivation for the present study.

Adversative and concessive conjunctions are expressions that indicate semantic relations of contrast or concession between text spans of varying extent. Very often, a conjunction encoding adversative or concessive relations can be used with multiple meanings depending on its context of use. For instance, as a prototypical example of the multivalent conjunction, *but* can be used with three distinct meanings including adversative, replacive and concessive (Halliday & Matthiessen, 2004). Examples (1) to (3) below illustrate the multivalent nature of *but*, which encodes adversative, replacive and concessive meanings.

- (1) *They are pretty, but I can't grow them.* (Adversative)
- (2) *Don't drown them, but give them just enough.* (Replacive)
- (3) I don't look after them, but they still grow. (Concessive)

(Halliday & Matthiessen, 2004, p. 422)

The distinctions between the different meanings of *but* illustrated by these examples seem to be rather straightforward to native-speakers. As noted above and as defined by Halliday and Matthiessen (2004), adversative relation means "X, but conversely Y", replacive relation means "not X but Y" and concessive means "in spite of" (p. 405). However, since the semantic relations of contrast and concession often display a great deal of overlap between them, these conjunctions can be difficult to use for EFL learners. It is therefore important to draw learners' attention to the distinct features associated with the different meanings of a certain adversative or concessive conjunction in a given context.

Apart from the semantic complexity, adversative or concessive relations can be marked by conjunctions of the structural and cohesive types, which display striking syntactic differences. For instance, the structural conjunction *but* in examples (1) to (3) above which encodes adversative, replacive and concessive relations can be substituted by conjunctive Adjuncts *on the other hand*, *instead* and *nevertheless*, respectively, as illustrated by examples below.

- (1a) *They are pretty. On the other hand, I can't grow them.* (Adversative)
- (2a) Don't drown them. Instead, give them just enough. (Replacive)
- (3a) I don't look after them. Nevertheless, they still grow. (Concessive)

Conjunctive Adjuncts are also called "cohesive conjunctions" in Halliday and Matthiessen (2004, p. 408). As the term suggests, cohesive conjunctions function to

signal semantic relations not by structural means but by cohesion. Unlike structural conjunctions, which are "inherently thematic", cohesive conjunctions are "characteristically thematic" (Halliday & Matthiessen, 2004, p. 83). That is, the position a conjunctive Adjunct can take in a clause is flexible, although it is more likely to be found in the thematic (clause-initial) position. However, the choice of initial or non-initial position of a conjunctive Adjunct is not random. Rather, the syntactic position of a conjunctive Adjunct is motivated by various factors. For instance, the initial position is motivated by the need of the writer to signal the relation at the beginning of the clause. Non-initial positions of a conjunctive Adjunct can take various forms including post-subject position, the position after an initial circumstantial Adjunct, etc. A case in point is the various positions available to however, as illustrated by examples (4) to (9), taken from Halliday and Matthiessen (2004).

- (4) <u>However</u>, Mr Dayal has made a representation to the commissioner . . . (KOHL\_A)
- (5) Today, <u>however</u>, the paths of denominational religion have often become the hotbeds of intolerance and fanaticism, dogmatism and obscurantism, persecution and oppression, and training grounds of reaction and exploitation. (KOHL\_D)
- (6) This device, <u>however</u>, gives the President the whip hand of Parliament and can, in the case of authoritarian Presidents, prove disastrous. (KOHL\_A)
- (7) *It was not, however, to be a precedent, he said.* (KOHL A)
- (8) I maintain, however, that if anybody has to go, it should be myself. (KOHL\_A)
- (9) This did not happen, <u>however</u>. (KOHL\_D)

(p. 132)

Given the complex nature of adversative and concessive conjunctions at both syntactic and semantic levels mentioned above, these conjunctions may be a source of difficulty for EFL learners. While the differences between various conjunctions encoding adversative and concessive relations can be very subtle, their conditions of use associated with different senses need to be explained to EFL learners. I thus felt that an investigation of these conjunctions in EFL learners' writing in comparison with those in native-speakers' texts, taking into account factors such as syntactic positions and co-occurrence patterns, would contribute to our knowledge of the features of learner language, which prepares ground for pedagogical intervention. In fact, the dissertation was initially motivated by the observation that Chinese EFL learners' use of adversative and concessive conjunctions differs considerably from that of native-speakers.

To sum up, my motivation to study a group of adversative and concessive conjunctions in texts written by Chinese EFL learners and native-speakers is two-fold. First, because of the complex nature of adversative and concessive relations at both syntactic and semantic levels, these conjunctions may cause difficulty to EFL learners. It is thus significant to probe into the context in which different adversative and concessive conjunctions occur so as to understand the specific semantic relation they encode. Secondly, there has not been any research on the instantiation patterns of adversative and concessive conjunctions in EFL writing from a corpus-based systemic functional perspective. Although there has been a great deal of corpus-based research on the use of conjunctions and linking adverbials in EFL writing, little attention has been given to the fine-grained meaning distinctions between conjunctions. Indeed, one of the fundamental problems with most of the previous corpus-based research is that the descriptions tend to focus on instances gathered from the corpus or corpora without being well-informed or motivated by any theoretical framework.

# 1.3 Aims of the study

Broadly stated, the primary aim of the present study is twofold: to describe the use of adversative and concessive conjunctions in Chinese EFL writing (contrasted with native writing); and to provide detailed grammatical analyses of specific adversative

and concessive conjunctions in native-speaker writing, focusing on patterns of use absent from Chinese EFL writing.

Following the distinction between structural and cohesive types of conjunctions made in Halliday and Matthiessen (2004), the use of the structural conjunctions are described with reference to the tactic and logico-semantic types, whereas the cohesive ones are explored taking into account their textual function to "manage the discourse flow beyond clause complex" as well as their logico-semantic types (p. 88).

The learner data is taken from the Chinese English learner corpus and the native-speaker data is based on British Academic Written English Corpus. Descriptions of the two corpora will be provided in Chapter 3, Section3.1. Drawing on data from these two corpora, particular attention is paid to the syntactic and the co-occurrence patterns of adversative and concessive conjunctions, which may be significant for interpreting the semantic relations encoded by these conjunctions. For instance, while but, while and however are prototypical examples of multivalent conjunctions, the meanings of these conjunctions are explored in relation to their syntactic and co-occurrence patterns, with the use of corpus techniques. What is equally interesting is to find explanations for the functional types of conjunctions in question that have not been systemically described in the literature. One interesting example is the use of on the contrary by native-speaker writers, which seems to challenge any previously defined classifications of its function.

Inspired by Halliday and Matthiessen's (2004) notion of 'agnateness', one solution to facilitating the analysis of adversative and concessive conjunctions is to explore the alternative expressions that can be used in place of a conjunctive item without leading to any significant change of meaning. They suggest that explaining something consists not of stating how it is structured but in showing how it is related to other things: its pattern of systemic relationships, or agnateness (p. 31).

## 1.4 Research questions

Specifically, the present study aims at addressing the following questions:

- 1. How do the uses of adversative and concessive conjunctions by Chinese EFL learners and native-speakers compare in terms of overall frequency, distribution of the types of inter-dependency and semantic relations and positional distributions?
- 2. How do the co-occurrence patterns of *but* bear on the types of logico-semantic relations it encodes?
- 3. How are the positions of *while*-clauses and co-occurrence patterns of *while* related to the types of logico-semantic relations it encodes?
- 4. How are the various syntactic positions of *however* related to the types of semantic relations it signals?
- 5. How can different functional types of *on the contrary* be characterized in systemic functional grammar?
- 6. How do recourses of clause complexing and CONJUNCTION complement each other in the grammatical realization of rhetorical relations at text-level?
- 7. To what extent does the analysis of conjunctions in this dissertation shed new light onto the proposed systemic functional descriptions of clause complexing and CONJUNCTION?

The first question is addressed by examining a group of adversative and concessive conjunctions in the learner corpus and the comparable native-speaker corpus. The investigation aims to provide a quantitative overview of these conjunctions in terms of four aspects: i) overall frequency; ii) distribution of the types of inter-dependency between clauses, namely paratactic, hypotactic and cohesive; iii) semantic sub-types, i.e. adversative, concessive and replacive and iv) positional distributions. This overview provides a starting point for addressing the second, third and fourth research questions concerning three individual conjunctions, namely *but*, *while* and *however*. Concordance output for these three conjunctions is examined for systemic functional analysis to uncover the consistent or recurrent differences across the

corpora. The fifth question is addressed by investigating the instances of *on the contrary* in the native-speaker corpus, with the focus being turned on the functional distinctions between two types of *on the contrary* emerging from the corpus. The sixth question is answered by investigating the instantiation patterns of adversative and concessive conjunctives in a full-length text taken from the learner corpus.

Finally, answers to the first six questions are reviewed in relation to the effectiveness of systemic functional grammar for the present investigation of adversative and concessive conjunctions thereby addressing the last research question.

# 1.5 Organization of dissertation

This chapter has discussed the research background, the main motivations for the present study, the aims of the study and the research questions. The rest of the dissertation is organized as follows. Chapter 2 starts with a review of the theoretical approaches to 'conjunction', including traditional grammar descriptions and the SFL-based descriptions. And then, different classifications of adversative and concessive relations are reviewed to highlight the complementarities between clause complexing and the system of CONJUNCTION in the realization of adversative and concessive relations from a systemic functional perspective. Finally, previous empirical research on the use of conjunctions alongside with linking adverbials in EFL writing is reviewed. Some fundamental problems with previous research are discussed to highlight the motivation for applying the corpus-based systemic functional perspective to the study of adversative and concessive conjunctions.

Chapter 3 presents the design and methodology of the study, focusing on the complementarities between corpus-based methodology and text-based manual analysis.

Chapter 4 presents an overview of a group of 17 adversative and concessive conjunctions in the writing of Chinese EFL learners in comparison with their native-speaker counterparts. Comparisons are made in four aspects: i) overall frequency; ii) distribution of the types of inter-dependency between clauses; iii) distribution of semantic categories and iv) positional distributions.

The general overview of a total number of 17 adversative and concessive conjunctions is followed by the in-depth study of four specific conjunctions, namely but, while, however and on the contrary. Chapter 5 is a detailed study of the instantiation patterns of the paratactic conjunction but with a view to identifying the potential interconnections between co-occurrence patterns and the types of logico-semantic relations signaled by the conjunction. Chapter 6 examines the use of the hypotactic conjunction while by native writers and Chinese EFL learners, with a view to establishing the interconnections between the syntactic patterns and the types of logico-semantic relations signaled by while. Chapter 7 examines the use of however in different syntactic positions and the corresponding functions by the two groups of writers. Chapter 8 focuses on the description of two functional types of the cohesive conjunction on the contrary emerging from the native-speaker corpus with Theme and Rheme analysis.

Chapter 9 explores the instantiation patterns of adversative and concessive conjunctions in full-length texts written by Chinese EFL learners. Due to the scope of the study and a wide range of factors to be considered in text-based analysis, only one full-length text is selected from the learner corpus for in-depth analysis.

Chapter 10, being the final chapter of this dissertation, summarizes the major findings and draws conclusions. The findings are summarized in relation to the research questions presented in Chapter 1. The significance of the present study is highlighted. Directions for future research are also suggested.

# **Chapter 2 Literature Review**

This chapter presents a critical review of the theoretical and empirical research on conjunction (or conjunctions). It is organized as follows. Section 2.1 provides a theoretical overview of 'conjunction'. Section 2.2 narrows the scope further and discusses the classifications of adversative and concessive relations and the corresponding conjunctions in the literature. This is followed by a review of the previous empirical research on the use of conjunctions in EFL writing in the literature in section 2.3. Some of the fundamental problems with previous research on the use of conjunctions in EFL writing are discussed, which provides the motivation for adopting a different perspective, i.e. the SFL-based perspective in the present study.

## 2.1 Traditional and systemic functional grammar descriptions of conjunction

Conjunction alongside with linking adverbials has been studied form different perspectives in the literature, which results in different classification schemes of semantic relations accordingly. However, not all approaches are immediately relevant to the present study. Given the limited scope of this section, it is decided that the notion of 'conjunction' will be reviewed mainly from two perspectives: i) the characterization of conjunction and linking adverbials in traditional reference grammars (e.g., Quirk et al., 1985; Biber et al., 1999; Huddleston & Pullum, 2002); ii) the SFL-based approach to clause complexing and the system of CONJUNCTION (Halliday & Matthiessen, 2004). The contrast between the two approaches is discussed to highlight the significance of adopting the SFL approach to the study of adversative and concessive conjunctions.

# 2.1.1 Traditional descriptions of conjunctions and linking adverbials

This section discusses conjunctions and linking adverbials based on three major reference grammars, namely A comprehensive grammar of the English language

(Quirk et al., 1985), Longman grammar of spoken and written English (Biber et al., 1999) and The Cambridge grammar of the English language (Huddleston & Pullum, 2002). These three grammars have been widely acknowledged as standard reference grammars of English. The treatment of conjunctions and linking adverbials by these works will provide some general background to the present study of adversative and concessive conjunctions from a systemic functional perspective.

But before moving on to the detailed descriptions, the reasons why the label *traditional* has been applied to these grammars need to be pointed out. These grammars may be labeled *traditional* because they rely heavily on traditional terminology (Aarts, 2004). Furthermore, the presentation of the grammatical structures in these works is more concerned with description of language facts than explanations. The difference between being fact-oriented and explanation-oriented is viewed by Aarts as a key difference between traditional grammar and generative grammar, the latter being theoretical in orientation. On the other hand, Halliday (1977) proposes an important distinction between formal and functional grammars. While formal grammars focus on the explanation of forms, systemic functional grammar focuses on the explanation of forms in terms of their functional features (Halliday, 1977).

It is worth pointing out that in addition to their traditional nature, these grammars are also informed by a number of linguistic theories, as pointed out by numerous scholars. For instance, according to Huddleston (1988), Quirk et al. (1985) is influenced by Systemic Functional Linguistics (cf. Halliday 1979, 1993). Aarts (1989, pp. 167-168) notes that Quirk et al. (1985) is influenced by Case Grammar, which highlights the semantics of argument structure (cf. Cook, 1989), as well as Speech Act Theory, focusing on the locutionary, illocutionary and perlocutionary value of utterances (cf. Austin, 1962; Searle, 1969). Quirk et al. (1985), who mention "systematic correspondences" (Quirk et al., 1985, p. 57), is also a reflection of the influence of

generative linguistics which assume syntactic transformations between different levels of representation (cf. Chomsky, 1957) on their work. These influences on Quirk et al. (1985) also apply to Biber et al. (1999), which is developed within the general framework of Quirk et al. (1985): "[f]rom CGEL A comprehensive grammar of the English language] we have also borrowed, with few exceptions, the grammatical framework of concepts and terminology which has provided the present book with its descriptive apparatus" (Biber et al., 1999, p. viii). The influence of generative linguistic is also found in Huddleston and Pullum (2002), as noted by Aarts (2004, p. 368ff). Furthermore, Leech (2004, p. 124) and Aarts (2004, p. 366) point out that Huddleston and Pullum (2002) is influenced by Phrase Structure Grammar, which is generative but non-transformational (cf. Pollard & Sag, 1994).

The linguistic theories that influence the three major reference grammars, however, may be of less concern to the present investigation of conjunctions as compared with another difference with respect to the focus on the theory and data. Leech (2004, p. 126) proposes a continuum of grammars ranging from extreme data-orientation, to the middle ground of descriptive orientation, to extreme theory-orientation. Similarly, Biber et al. (1999) note that one basic difference between studies of grammars lies in whether the primary goal is theoretical or descriptive. They further argue that LGSWE is descriptive in orientation. It is also labeled as use-oriented because of its reliance on corpus data and a considerable amount of attention paid to the distribution of grammatical features across registers and choices between grammatical variants as determined by discourse factors. Biber et al. adopted a corpus-based methodology, exploring the frequencies and functions of grammatical features in a large corpus of over 40 million words of authentic material mainly from four registers: conversation, academic prose, news and fictional. The obvious influence of corpus linguistics on Biber et al. is a distinguishing feature of LGSWE that makes it different from the other two grammars, which although they make use of corpus data, cannot be labeled as corpus-based grammars. The empirical study of this dissertation to be presented in Chapters 5-9 is corpus-based and focuses on the choices made by learners and native-speakers of adversative and concessive conjunctions to encode relations of contrast and concession. Therefore, for the present purposes, the traditional accounts of conjunctions and linking adverbials will be primarily based on Biber et al. (1999), while the other two grammars, namely Quirk et al. (1985) and Huddleston and Pullum (2002) will be referred to only briefly.

Although none of these grammars use the same classification scheme or terminology, a distinction is generally made between conjunctions and linking adverbials (Biber et al., 1999). Linking adverbials are what Huddleston and Pullum (2002) call "connective adverbials" and Quirk et al. (1985) call "conjuncts". The difference between conjunctions and linking adverbials is reflected in the presentation of the corresponding grammatical items in Biber et al. (1999). While conjunctions are discussed under the heading of word and phrase grammar, linking adverbials are dealt with in the part of clause grammar in LGSWE (Biber et al., 1999). However, despite the apparent differences, they note that both linking adverbials and conjunctions are important devices for creating textual cohesion (p. 875).

Conjunctions belong to function words within closed systems, where the new members cannot easily be added (Biber et al., 1999). Based on the relation between the clauses or elements linked, conjunctions in Biber et al. are classified into two syntactic categories: i) coordinators, or coordinating conjunctions which are used to link elements which have the same syntactic role; ii) subordinating conjunctions which introduce dependent clauses. The classification is maintained in the other two grammars, namely Quirk et al. (1985) and Huddleston and Pullum (2002). Biber et al. (1999) note that "the main coordinators are *and*, *but*, and *or*, with a core meaning of addition, contrast, and alternative, respectively" (p. 79). Subordinators fall into three major subclasses: i) The great majority of subordinators introduce adverbial clauses: *after*, *as*, *because*, *if*, *since*, *although*, *whether*, *while*, etc.; ii) Three subordinators

introduce degree clauses: *as, than, that* iii) Three subordinators introduce complement clauses (or nominal clauses): *if*; *that, whether* (p. 85). They further note that the first two subcategories of subordinators seem to be more relevant to the semantic relations between the clauses in terms of time, reason, condition, comparison, etc., whereas the subordinators in the third subcategory have little meaning apart from marking structural dependency and are often classified as complementizers, i.e. words which introduce complement clauses (p. 85).

While conjunctions including subordinators and coordinators function to link clauses or elements at clause level or below the clause, linking adverbials are deployed "to make semantic connections between spans of discourse of varying length" (Biber et al., p. 558). The classification of linking adverbials according to semantic relations in Biber et al. is summarized in Table 2.1 below.

Table 2.1 Biber et al.'s (1999) classification of linking adverbials (pp. 875-879)

Sub-category	Meaning	Example
Enumeration and addition	used for the enumeration of	first(ly), in the first / second
	pieces of information in an	place, to begin with, in
	order chosen by the speaker /	addition, similarly, furthermore
	writer and for the adding of	
	items of discourse to one	
	another.	
Summation	a unit of discourse is intended	in sum, to conclude
	to conclude or sum up the	
	information in the preceding	
	discourse	
Apposition	the second unit of text is to be	in other words, for example,
	treated either as equivalent to or	that is
	included in the preceding unit	
Result/inference	the second unit of discourse	so, therefore, thus,
	states the result or consequence	consequently, then
	<ul> <li>either logical or practical- of</li> </ul>	
	the preceding discourse	
Contrast/concession	mark incompatibility between	on the other hand, alternatively,
	information in different	though, anyway, yet
	discourse units in some way, or	
	signal concessive relationships	
Transition	mark the insertion of an item	now, incidentally, by the way,
	that does not follow directly	meanwhile
	from the previous discourse	

As can be seen from Table 2.1 and as indicated in Biber et al. (1999), the

classification scheme is proposed on the basis of the semantic similarities shared by the members of linking adverbials in each subcategory, which will be compared with the system of CONJUNCTION provided by Halliday and Matthiessen (2004) reviewed in Section 2.1.3.

Biber et al. (1999) admit that "the flexibility and complexity of language defy our neat classification systems" (p. 59). The semantic overlap signaled by the linking adverbials is reflected in the name of the associated subcategories illustrated in Table 2.1. For 'enumeration and addition', 'result/inference' instance. 'contrast/concession' seem to suggest that the linking adverbials in these categories show considerable semantic overlap between two sub-categories included. The inclusion of these semantic sub-types in one category seems to be legitimate because of the semantic proximity between them and the obvious difference with linking adverbials in other categories. On the other hand, the authors note the distinctions between the sub-types in providing descriptions of these categories. For instance, concerning the 'contrast/concession' category, Biber et al. (1999, p. 878) explicitly mention the distinction between three sub-categories: i) adverbials which mark contrast, alternatives, or differences (e.g., on the other hand, in contrast, alternatively); ii) adverbials which more clearly mark a concessive relationship, showing that the subsequent discourse express some reservation about the idea in the preceding discourse (e.g., though, anyway); iii) adverbials which mark a combination of contrast and concession (e.g., however, yet).

Similarly, while 'enumeration' and 'addition' are included in one category, 'enumeration' seems to be more restricted than 'addition'. While linking adverbials of 'addition' simply mark the next unit of discourse as being added to the previous one, those of 'enumeration' indicate that pieces of information are presented in an order chosen by the speaker/writer (p. 875). 'Addition' can be marked by linking adverbials such as *in addition*, *furthermore*, *also* and *moreover*, etc. The order associated with

'enumeration' is typically specified by ordinal numbers such as *first* and *second* and adverbs such as *finally* and *lastly*, as well as other structures such as prepositional phrases, *for one thing* and *for another*. Biber et al. further distinguish between sequence of information presented in discourse and real-life logical or time sequence, but they emphasize that the former is more commonly associated with 'enumeration' (p. 875). The sub-category of 'enumeration' in Biber et al. is also similar to the internal and external distinction of temporal relations made in Halliday and Hasan (1976) (see also Halliday & Matthiessen, 2004; Martin, 1992).

The inclusion of both 'result' and 'inference' in the result/inference category as illustrated in Table 2.1 is also reasonable given the close link between the two relations. However, Biber et al. (1999) seem to suggest that linking adverbials of the 'inferential' subtype represent more marginal cases compared with those of 'resultive'. The distinction between the two sub-categories is illustrated with a pair of examples in Biber et al (1999, p. 878), quoted as (1) and (1a) below.

- (1) He works late. How am I supposed to get there then? (CONV)
- (1a) He works late; therefore, he cannot drive me there.

Biber et al. (1999) suggest that while *therefore* in (1a) functions to mark result of the propositional content of the preceding sentence, i.e. 'he works late', *then* in (1) only marks a relation of inferred result (p. 878).

In addition to the semantic overlap between the defined categories of linking adverbials, Biber et al. (1999) also note that linking adverbials may overlap with the other two types of adverbials, namely, circumstantial and stance adverbials. The following example of *in sum* from Biber et al. (1999, pp. 879-880) illustrates the point:

(2) *Inevitably it <the crucial question> must be answered in such a way as to produce* 

either a kind of dualism or a true monism. In the former case, mental indispensability cannot be achieved by what is on hand. In the latter case, the upshot is Local Idealism <...>. Identity Theories, in sum, face a defeating dilemma. (ACAD)

Here, 'ACAD' in brackets indicates the source of the data, namely academic prose. Biber et al. suggest that in sum highlighted in bold conveys a sense of summation and style at the same time. The reason for this interpretation given by Biber et al. is that the summative statement marked by in sum is also a brief analysis of a situation in the sense of in brief, which is clearly a stance adverbial of style. The overlap between linking adverbials with other grammatical categories has also been identified with other markers, such as indeed, in fact and besides, as discussed by Traugott (1997) under the heading of grammaticalization. As Traugott points out, discourse markers typically develop from lexical items into items to serve grammatical functions and occur in well-defined syntactic slots. The typical diachronic path is described by Traugoot (1977, p. 13) as follows: Verbal adverb> sentence adverb > discourse markers (for the discussion of the shifts "normally associated grammaticalization", see Traugott 1997).

As indicated earlier in this section, apart from the description of structural features, a major contribution of Biber et al. (1999) is the description of patterns of use based on the corpus. The distribution of conjunctions and linking adverbials across four registers, namely conversation, academic prose, news and fiction identified in Biber et al. will be reviewed briefly below. However, given the scope of this section, I will focus on the distribution of conjunctions and linking adverbials in the semantic domains of contrast and concession. See Biber et al. (1999) for detailed information on the distribution of conjunctions and linking adverbials of all categories.

First, regarding conjunctions, Biber et al. (1999, p. 81) note that of the four coordinators, namely, *and*, *but*, *or*, and *nor*, *but* is most frequent in conversation and

fiction, and least frequent in academic prose. The high frequency of but in conversation is interconnected with the high frequency of negation, both of which is frequent due to the interactive nature of conversation. The low frequency in academic prose may be due in part to the fact that contrast is more often expressed by other means in academic writing: forms such as although, however, nevertheless, and on the other hand are more frequent in academic prose than in the other registers (p. 82). With subordinators, only those that introduce adverbial clauses are relevant for the discussion of adversative and concessive conjunctions. As indicated, being function words, subordinators are dealt with in the part of word grammar, but most discussion of subordinators is found in the part of clause grammar, where circumstantial adverbials are discussed. According to Biber et al., circumstantial adverbials can be realized by clauses as well as single words and phrases. Clauses as circumstantial adverbials include the use of subordinators, accompanied with distinct semantic categories including 'time', 'manner', 'reason', 'concessive' and 'condition' (p. 818) These circumstantial adverbials realized by clauses introduced by subordinators are what Halliday and Matthiessen (2004) have defined as hypotactically dependent clauses in clauses nexuses. Regarding the concessive type, three subordinators though (including even though) although, and while are discussed. Biber et al. (1999, pp. 841-845) suggest that for concessive relationships, users have a choice between though, although and while. They further note that when though is used as a subordinator, it is synonymous with although, whereas while is a subordinator with multiple semantic roles. Interestingly, the subordinator whereas is not included in the semantic category of concessive, while other scholars such as Quirk et al. (1985) explicitly mention whereas as a marker of concession. Regarding the distribution of the concessive subordinators across registers, Biber et al. (1999) note that academic prose favors although due to a slightly more formal tone to it, which fits the style of academic prose (p. 845). The high frequency of although seems to be motivated by an attempt to distinguish this subordinator from the common use of though as a linking adverbial in conversation. In contrast to the high frequency of although in academic prose, though is slightly more frequent in conversation and fiction. They also note that overall concessive classes are uncommon in conversation. The subordinator while is less frequent than although in academic prose but more frequent in News. While is least frequent in conversation and fiction. The distribution of while across the registers is also interconnected with its multiple semantic roles including concession/contrast and time. As suggested by Biber et al., almost all occurrences of while as a subordinator in conversation express time, whereas over 80% of the occurrences in academic prose mark concession/contrast. In academic prose, the high frequency of while used in an adverbial clause of concession is related to its function to contrast information in the main clause and the adverbial clause. In contrast, the occasional use of while in temporal relation is associated with the descriptions of procedures or case reports in academic prose (p. 849). The functional distribution of while-clauses will be explored in Chapter 6.

The distribution of linking adverbials in different semantic categories also shows great differences. According to Biber et al. (1999, p. 880), linking adverbials are considerably more common in conversation and academic prose than in fiction and news. Regarding linking adverbials of contrast/concession, conversation, fiction, and academic prose share a similar level of frequency, whereas news has substantially less use of this type of linking adverbials. The function of contrastive/concessive linking adverbials in academic prose, as pointed out by Biber et al. (1999), is related to the authors' need to highlight contrasting information, which often leads to main points that academic authors want to make (p. 881).

Having reviewed the accounts of conjunctions and linking adverbials in terms of semantic categories and distribution of the semantic categories in Biber et al. (1999), there is still another aspect that has not been discussed, that is, the position of conjunctions and linking adverbials. Closely related to their distinct grammatical status, conjunctions and linking adverbials can be distinguished on the basis of the syntactic positions they can take in a clause. While conjunctions are fixed in the initial

position of the clause, linking adverbials can be placed in a variety of positions within the clause. Note that although subordinators are fixed in the initial position of the clause, the adverbial clauses introduced by subordinators can be placed either before or after the main clause and even in medial positions (Biber et al., 1999). They further note that despite the flexibility of linking adverbials to occur in different syntactic positions, the most common position for linking adverbials is initial across registers (p. 890). The use of initial position is closely related to the connective function of linking adverbials. As pointed out by Biber et al. (1999), "the initial position allows linking adverbials to mark explicitly the connection between units of discourse at the point when the connection is usually being made between clauses or units larger than clauses" (p. 891). They also note that in academic prose, medial positions account for the second highest proportion of occurrences and final position is rare. They mention three common linking adverbials that are commonly found in medial positions (when not in initial position) in academic prose-therefore, thus, and however. These linking adverbials are commonly found in the position immediately following subject in academic prose. However, since the functional distinctions between initial and non-initial linking adverbials are not discussed in Biber et al., they seem to suggest that there is no significant functional difference between clause-initial and non-clause-initial linking adverbials. This point will be further discussed in the empirical study of this dissertation.

To sum up, the distinction between conjunctions and linking adverbials as two separate word classes, as treated by Biber et al. (1999), is generally accepted in traditional grammar, although there is considerable difference with respect to terminology and classification schemes of sub-categories. As indicated, given the scope this section, the detailed classification schemes of conjunctions and linking adverbials provided in the other two equally popular reference grammars, namely Quirk et al. (1985) and Huddleston and Pullum (2002) are not presented. The focus on Biber et al. (1999) is also due to their corpus-based methodology, which is also the

methodology of the present study, as indicated in the title of the thesis.

Despite the great similarity shared by conjunctions and linking adverbials with respect to semantic relations they encode, the accounts in traditional grammar, as exemplified by Biber et al. (1999), seem to focus more on their distinct grammatical functions in the clause. Linking adverbials are discussed in Biber et al. (1999) in the part devoted to adverbials, a fact suggesting that linking adverbials are similar to the other two types of adverbials, namely circumstantial and stance adverbials by being adverbials in a clause. On the other hand, while both coordinating and subordinating conjunctions are discussed under the heading of *word grammar*, a great deal of discussion of subordinators is found in the chapter on circumstantial adverbials. While it is legitimate to present coordinating and subordinating conjunctions in this manner, their presentation seems to obscure the underlying similarity between the two types of conjunctions in marking structural relations within the sentence boundary.

Admittedly, Biber et al. (1999, p. 875), who state, "linking adverbials are important devices for textual cohesion, alongside coordinators and subordinators" are well informed of the semantic relations encoded by conjunctions and linking adverbials. The semantic common ground is also reflected in the semantic classifications of conjunctions and linking adverbials in Biber et al. (1999) as discussed in this section. However, the complementarity between conjunctions and linking adverbials in realizing semantic relations seems to be less straightforward as compared with the systemic functional account of clause complexing and conjunction (Halliday & Matthiessen, 2004) to be presented in the following section. Again, it is worth highlighting that the corpus-based methodology of Biber et al. provides significant insight into the present investigation of adversative and concessive conjunctions.

## 2.1.2 The SFL-based approach to clause complexing and CONJUNCTION

This section provides a systemic functional account of clause complexing and conjunction based on Halliday and Matthiessen (2004), which is the theoretical

foundation of the descriptions of adversative and concessive conjunctions offered in the following chapters. Specifically, it aims to illustrate the complementarities between the lexicogrammatical recourses of clause complexing and (cohesive) conjunction to realize a set of semantic relations. This section will thus begin with an overview of the complementarities of these resources as highlighted in Halliday and Matthiessen (2004) and then a more detailed account of clause complexing in terms of the tactic and logico-semantic relations will be provided. Finally, the system of CONJUNCTION will be discussed, again focusing on the complementarities between clause complexing and conjunction in grammatical realization of rhetorical relations.

# 2.1.2.1 An overview of the complementarities between clause complexing and CONJUNCTION

Halliday and Matthiessen (2004, p. 369) argue that the grammatical opportunities for realizing a semantic sequence form a scale defined by two poles: one pole is the circumstantial augmentation of a simple clause with circumstantial element (as in after the time of a, b happened) and the other is the cohesive sequence of two independent clauses (as in a happened. Then b happened). In the middle ground lies the augmentation of a clause by means of another to form a clause complex (as in a happened and then b happened or after a happened, b happened). They further argue that the clause complex is not a single point on this scale; it covers two sub-regions: closer to the pole of circumstantial augmentation is hypotactic sequence characterized by unequal status of clauses (as in when a happened, b happened); closer to the pole of cohesive sequences is paratactic sequence characterized by equal status of clauses (as in a happened, then b happened) (Halliday & Matthiessen, 2004, p. 369). Thus, clause complexing is complemented by circumstantial augmentation and cohesive sequences in realizing semantic sequences. The details of the logico-semantic types, i.e. expansion and projection will be provided in two subsequent sections; for the purposes of this overview, it suffices to say that expansion and projection are discussed as fractal types manifested throughout the lexicogrammar in Halliday and Matthiessen (1999/2006). The fractal types, as stated by Halliday and Matthiessen (1999, p. 223), "constitute an additional order of agnation that is projected onto the ideational system as a whole, referred to as fractal agnation". The interconnections between these resources realizing semantic sequences are presented diagrammatically in Figure 2.1 (Halliday & Matthiessen, 2004).

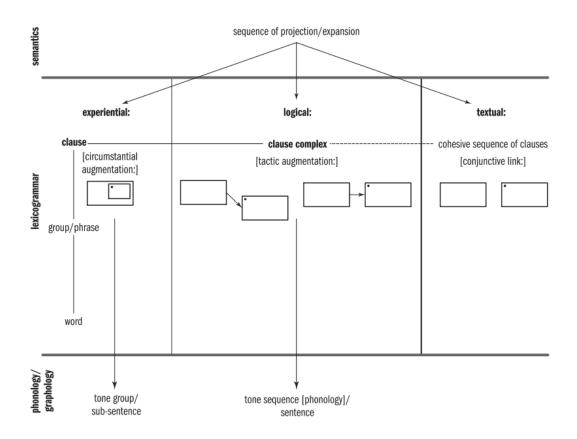


Figure 2.1 The location of the clause complex in terms of stratification, metafunction and rank (Halliday & Matthiessen, 2004, p. 370)

As can be seen from Figure 2.1 above, clause complexing is organized by the logical mode of the ideational metafunction, depicted in the middle of the diagram. It is contrasted with circumstantial augmentations of the clause (experiential) on the left-side diagram and cohesive sequences (textual) on the right. In terms of stratification, a clause complex within the stratum of lexicogrammar realizes a sequence of projection or expansion in the stratum of semantics above and at the same time it is realized by a sequence of tones (sentences) in the stratum of phonology (graphology). In terms of

rank, clause complexing is located at the highest rank of the grammar — clause rank; and it is thus related to the clause in terms of logical complexing rather than in terms of experiential constituency.

#### 2.1.2.2 The tactic and logico-semantic relations of clause complexing

The account of clause complexing in Halliday and Matthiessen (2004), which was first outlined in Halliday (1985), relies on two simultaneous systems of LOGICO-SEMANTIC TYPE and degree of interdependency, i.e. TAXIS. Taxis is the contrast between 'hypotaxis' and 'parataxis', namely between "unequal" and "equal" status of the clauses combined. Conjunctions used in the paratactic relation are called linkers (e.g. and, but, or), whereas hypotactic relations are associated with binders (e.g. when, while, because, since, if, although, etc.). Paratactic relation is thus similar to coordination, whereas hypotactic relation is similar to subordination in the traditional accounts of conjunctions, as discussed in Section 2.1.1. However, it is worth noting that according to Matthiessen and Thompson (1988), the traditional notion of "subordination" failed to distinguish between hypotaxis and embedding. In each type of the relational structure, namely parataxis and hypotaxis, there is one primary clause (also called 'initiating' in parataxis, and 'dominant' in hypotaxis) and one or more secondary clauses ('continuing' in parataxis and 'dependent' in hypotaxis). The types of logico-semantic relations that combine clauses into clause complexes are more complex than the two-way distinction of tactic relations. Halliday and Matthiessen suggest that the logico-semantic relations between tactically related clauses fall into two broad types: projection and expansion.

Projection is a logico-semantic relation where the secondary clause represents the linguistic 'content' of the primary clause (Halliday & Matthiessen, 2004). Halliday and Matthiessen further classify projection into three subtypes: i) locution; ii) idea and iii) fact. However, since projection seems to be less relevant to the present investigation of adversative and concessive conjunctions than expansion, the

discussion below will focus on subtypes of expansion. It is within relations of expansion that adversative and concessive relations are found.

Expansion is a logico-semantic relation where the secondary clause expands the primary one in a clause nexus (Halliday & Matthiessen, 2004). A clause nexus, according to Halliday and Matthiessen, is each single linkage within a clause complex (p. 8). They further classify expansion into three subtypes: i) elaboration; ii) extension; and iii) enhancement. Given the scope of this section and the purpose of the present study, not all subtypes of expansion relations will be discussed with equal degree of delicacy. As suggested in the title of the dissertation, the study is concerned with adversative and concessive conjunctions. The following account will focus on the adversative subtype of extension and concessive subtype of enhancement. In addition, the replacive subtype of extension, due to the close link with adversative relation, will also be discussed below. Similar relations that operate with cohesive sequences will be discussed later in this section.

With elaboration (notation paratactic1=2; hypotactic  $\alpha=\beta$ ), one clause expands on another by further specifying or describing it; The secondary clause does not introduce a new element into the picture but rather provides a further characterization of one that is already there, restating it, clarifying it, refining it, or adding a descriptive attribute or comment (Halliday & Matthiessen, 2004). They further argue that elaboration may be either paratactic or hypotactic; the two are contrasted in terms of meaning and realization. Table 2.2 below presents a summary of the relevant information in Halliday and Matthiessen (2004) on the elaboration type of expansion. The table is organized in such a way to highlight the meaning distinctions between the subtypes of elaboration and the corresponding realizations.

Table 2.2 Descriptions of paratactic and hypotactic elaboration in Halliday and Matthiessen (2004, pp. 396-405)

		Hypotaxis		
sub-type	exposition	exemplification	clarification	description
meaning	'in other words' P i.e. Q	'for example' P e.g. Q	'to be precise' P viz. Q	
definition	The secondary clause restates the thesis of the primary clause in different words, to present it from another point of view, or perhaps just to reinforce the message.	The secondary clause develops the thesis of the primary clause by becoming more specific about it, often citing an actual example.	The secondary clause clarifies the thesis of the primary clause, backing it up with some form of explanation or explanatory comment.	The secondary clause (non-defining relative clause) functions as a kind of descriptive gloss to the primary clause.
realization	secondary: often unmarked; may be introduced by i.e. in writing or conjunctive markers or (rather), in other words, that is to say, I mean;	secondary: often unmarked; may be marked by e.g. in writing or the explicit conjunctives for example, for instance, in particular	secondary: often unmarked; may be marked by <i>i.e.</i> or <i>viz.</i> in writing or the expressions <i>in</i> fact, actually, indeed, at least	secondary: non-defining relative clause, either (i) finite introduced by wh-element, or (ii) non-finite
other features accompanying the elaboration	a lexico- semantic link	lexical cohesion of hyponymy or meronymy	a shift in polarity	
example	I probably needed that; it was very healthy.	We used to have races — we used to have relays.	They weren't show animals; we just had them as pets.	He talks down to people, which automatically puts people's backs up.

As can be seen from Table 2.2, while hypotactic elaboration forming the structure of non-defining relative clause is typically marked *wh*-elements, paratactic elaboration including exposition, exemplification and clarification, is typically unmarked. Halliday and Matthiessen (2004) suggest that "very often the two clauses are simply juxtaposed, signaled by a special punctuation mark, the colon or semicolon or by tone concord in spoken English" (p. 483). It is interesting to note, following Huddleston and Pullum (2002, p. 1735f), that the comma, colon and the semicolon, which 'normally mark boundaries within a sentence' indicate a weaker boundary than the full stop. Huddleston and Pullum (2002) argue that 'secondary boundary marks' may be arranged into 'a hierarchy of relative strength', with the semicolon and colon placed in the middle between the strongest full stop and the weakest comma. This can

be seen as a reflection of the status of parataxis closer to the pole of cohesive sequences, as discussed earlier in this section. The hypotactic elaboration, in contrast, is either marked with wh-elements or non-finite and cannot be juxtaposed with colons or semicolons. However, as pointed out by Halliday and Matthiessen (2004), juxtaposition of clauses with punctuation mark is a fairly recent innovation, never very consistently used, and the lack of any clear structure signal in the paratactic elaboration can be seen as the reason why the abbreviations i.e., e.g. and viz. were first introduced and why they continue to be used today. As illustrated in Table 2.2, an alternative way to signal the implicit relations of elaboration is through the use of conjunctive Adjuncts. For instance, or (rather), in other words, and for example, for instance serve to mark exposition and exemplification, respectively. The clarification subtype is signaled by Adjuncts such as in fact, actually and indeed. However, it is interesting to note that these expressions are polysemous — one textual sense marking textual transitions and one interpersonal sense expressing attitudes and comments. This is brought out e.g. by Traugott's (1977) study of the grammaticalization of "in fact" and "indeed" in these senses since Old English. The multifunction of in fact will be further explored in cases when it co-occurs with the prototypical adversative marker, namely, but in Chapter 5, Section 5.2.

With extension (paratactic notation 1+2; hypotactic notation  $\alpha+\beta$ ), one clause extends the meaning of another by adding something new to it (Halliday & Matthiessen, 2004). Specifically, the secondary clause provides an addition, replacement or alternative to the first clause. They further argue that unlike elaboration which shows great difference with respect to the semantic subcategories between parataxis and hypotaxis, extension shows a close parallel between the two structural relations. Three sub-types of extension applying to both parataxis and hypotaxis are recognized: i) addition; ii) variation and iii) alternation (Halliday & Matthiessen, 2004, pp. 405-10). Table 2.3 presents a summary of the principle markers of extending clause nexuses.

Table 2.3 Categories of extension and principal markers (Halliday & Matthiessen,

2004, p. 405)

	Category	Meaning	Paratactic	Hypotactic	
				Finite	Non-finite
(i) addition	'and', additive: positive	X and Y	(both) and; not only but also	while, whereas	besides, apart from, as well as
	'nor', additive: negative	not X and not Y	(neither) nor	-	-
	'but', adversative	X and conversely Y		while, whereas	without
(ii) variation	'instead', replacive	not X but Y	but not; not but	-	instead of, rather than
	'except', subtractive	X but not all X	only, but, except	except that	except for, other than
(iii) alternation	'or'	X or Y	(either) or (else)	if not ( then)	-

Table 2.3 is organized in such as a way to highlight the meaning distinctions between the three subtypes of extension alongside with the two types of interdependency relations, namely paratactic and hypotactic relations. Furthermore, Table 2.3 also indicates the multivalent status of the markers such as *but*, *while*, and *whereas*, which can be used to encode different sub-types of extension. These markers can also be used to mark relations of enhancement, which further adds to the complexity of disambiguation.

Following Halliday and Matthiessen (2004), the three sub-types of extension relations will be reviewed below in an order of paratactic relations followed by hypotactic relations.

Halliday and Matthiessen (2004) note that with addition, one process is simply adjoined to another; there is no implication of any causal or temporal relationship between them. The definition seems to highlight the distinction between addition as a subtype of extension and enhancement relations, such as causal and temporal relations. However, while adversative is included as a subtype of addition in Halliday and Matthiessen, Biber et al. (1999) consider 'contrast/concession' as a distinct type of linking adverbials not included in 'enumeration and addition'. Recall from the

previous section that linking adverbials of 'addition' in Biber et al.'s classification simply mark the next unit of discourse as being added to the previous one, whereas linking adverbials of 'contrast/concession' in the classification mark incompatibility between information in different discourse units in some way, or signal concessive relationships. While it is legitimate to treat them separately, Halliday and Matthiessen's (2004) classification seems to highlight not only the difference but also the similarity between the 'additive' and 'adversative' relations by being included in 'addition' subtype of extension. One piece of evidence they provide to support the inclusion of 'adversative' in 'addition' is that the linker *but* contains the feature 'and' which is a prototypical marker of paratactic additive (positive) relation so *and but* is not acceptable (see Table 2.3 above).

The distinction between the additive and the adversative subtype of addition lies in the element of contrast involved in the latter. As pointed out by Halliday and Matthiessen (2004), the additive (positive type) relation means 'X and Y', whereas the adversative relation means 'X and conversely Y' (p. 405). Also, while paratactic additive extension is typically marked by and, paratactic adversative extension is marked by but. However, when the sense of and is 'and then', 'and so' and the hypotactic version is an enhancing dependent clause, the paratactic nexus marked by and can be interpreted as one of enhancement instead of one of extension. In other cases, when and is followed by text reference items such as that or this, with the that/this referring back to (some part of) the previous clause, the sense may be one of elaboration, particularly if the continuing clause is a 'relational' one, as in but we've got to find those and that is the hard part (Halliday & Matthiessen, 2004, p. 406). The nearest hypotactic equivalent, as suggested by Halliday and Matthiessen, would be a non-restrictive relative clause, which is the hard part. The paratactic conjunction but is also subject to indeterminacy as to the type of relations it encodes, including not only the adversative and replacive types of extension but also the concessive type of enhancement. A plausible test of 'adversative' can be worked out from the associated cohesive sequences involving conjunctive Adjuncts such as *on the other hand*, *in contrast*, etc. For instance, in the example below taken from Halliday and Matthiessen (2004, p. 407), the paratactic conjunction *but* can be paraphrased as *in contrast*, as illustrated by (3a) below.

- (3) The solar elevation angle is comparatively low by October, when the hole was at its deepest, **but** is much higher in November, when the ultraviolet (UV) effect might be stronger at the surface.
- (3a) The solar elevation angle is comparatively low by October, when the hole was at its deepest. **In contrast**, it is much higher in November, when the ultraviolet (UV) effect might be stronger at the surface.

As can be seen from the pair of examples above, both *but* and the conjunctive Adjunct *in contrast* encode the adversative relation in the sense of 'X and conversely Y' (p. 405), but with (3a), the elliptical Subject in (3) has to be reinstated. As suggested by Halliday and Matthiessen (2004), Subject ellipsis with referential identity is not possible outside the domain of a clause complex. Moreover, there is still another criterion for distinguishing between adversative relations and other competing relations such as additive and concessive relations. This concerns the lexicogrammatical environment of the adversative relation. As can be seen from the above examples, i.e. (3) and (3a), antonym pairs (*comparatively low* vs. *much higher* and *by October* vs. *in November*) are closely associated with the adversative relation signaled by *but*. This point will be developed further in the empirical investigation of individual conjunctions to be presented in the subsequent chapters.

The other two subtypes of extension, namely variation and alternation, seem to be more straightforward, thus involving a lower degree of indeterminacy than extension.

As can be seen from Table 2.3, variation falls into two subtypes, namely 'replacive',

typically marked by *instead* and 'subtractive' typically marked by *except* (Halliday & Matthiessen, 2004). However, 'subtractive' in the sense of *except* seems to be less relevant to the adversative or concessive relation than 'replacive'. This is evidenced by the use of *but* to mark paratactic replacive relation meaning 'not X but Y' (see Table 2.3, p. 42). Although it is equally possible for *but* to be used in the adversative or concessive sense, the replacive *but* is characterized with a shift in polarity. The following example from Halliday and Matthiessen (2004, p. 407) illustrates the point.

(4) The vortex is not a uniform cylinder but has a shape that varies with altitude and is strongest and most isolated above the 400-K isentropic surface, around 15 km and above.

The clauses differ with respect to certain features of *the vortex*, one being construed in 'positive' terms and the other 'negative'. Halliday and Matthiessen emphasize that the *but* here is not adversative, and so is not replaceable by *yet*; nor is it concessive and thus it does not correspond to hypotactic *although*. Instead, a pattern of agnation holds between replacive *but* in (4) and the cohesive total replacement signaled by conjunctive Adjuncts such as *instead* or *on the contrary*, illustrated by (4a) below.

(4a) The vortex is not a uniform cylinder. Instead/on the contrary, it has a shape that varies with altitude and is strongest and most isolated above the 400-K isentropic surface, around 15 km and above.

On the other hand, it is worth noting that the replacive type of variation, which is again a subtype of extension, seems to border on the clarification type of elaboration discussed earlier. Under this interpretation, the relation in (4a) can be left implicit thereby bordering on elaboration, as illustrated by (4b) below.

(4b) The vortex is not a uniform cylinder; it has a shape that varies with altitude and

is strongest and most isolated above the 400-K isentropic surface, around 15 km and above.

A further piece of evidence of the semantic proximity between adversative and replacive is the inclusion of the latter in the former in Halliday and Hasan's (1976) classification of adversative relations (p. 255).

Having reviewed the three types of extension, it is worth pointing out that according to Halliday and Matthiessen (2004), extension is more frequently realized by parataxis with paratactic conjunctions than by hypotaxis with hypotactic conjunctions. The hypotactic type of extension appears to be fairly rare; it is, in fact, the least common of the combinations of types of expansion with types of taxis (cf. Nesbitt and Plum, 1988; Matthiessen, 2002a, cited in Halliday & Matthiessen, 2004). In the discussion below, I will review briefly hypotactic extension provided by Halliday and Matthiessen (2004).

First, concerning addition, Halliday and Matthiessen (2004) mention two hypotactic conjunctions, namely *whereas* and *while*. They further argue that there is a great deal of indeterminacy as to the distinction between the (positive) additive and the adversative; *while*-clauses and *whereas*-clauses sometimes have an adversative component, sometimes not. However, despite this indeterminacy between adversative and additive, they seem to suggest that adversative can be distinguished from concessive by mentioning that "finite clauses with *whereas*, *while*, *except that*, if they follow the primary clause, have a strongly paratactic flavor" (Halliday & Matthiessen, 2004, p. 408). They give the following example to illustrate this point.

(5) He pretended to know all about it-whereas in fact he had no idea of what was happening.

Halliday and Matthiessen (2004, p. 409) suggest that cases such as (5) can be interpreted as paratactic. In such instances the conjunction is always unaccented.

There is no finite form for replacive relation (Halliday & Matthiessen, 2004) so variation type of hypotactic extension will not be discussed further. Alternation, as mentioned earlier seems to be less relevant than the replacive type of variation to the discussion of adversative and concessive relations and hence will not be considered for further discussion. Having outlined the elaboration, extension types of expansion relations provided by Halliday and Matthiessen, I will now turn to the third type of expansion, namely, enhancement.

According to Halliday and Matthiessen (2004), in an enhancement relation, "one clause enhances the meaning of another by qualifying it in various ways, including with reference to time, place, manner, cause or condition" (p. 410). In light of these semantic categories, enhancement is thus much more complex than elaboration and extension discussed above. However, not all of these relations of enhancement will be considered with equal delicacy below. It is interesting to note that while Halliday and Matthiessen include concessive relation in the causal-conditional type of enhancement, Biber et al. (1999) treat 'concessive' and 'condition' as two separate types of circumstantial adverbial clauses introduced by subordinators. One apparent advantage of treating concession as a type of causal-conditional relation is that the underlying meaning of concession can be accounted for with reference to causal conditional relations. In the discussion below, I will try to highlight the interconnections between causal conditional and concession on the one hand and the distinction between concessive with adversative type of extension on the other.

It is worth noting that apart from Halliday and Matthiessen (2004), quite a number of other scholars also observe the close link between concession, condition and cause. The link is considered to be inherently associated with these relations as they propose

the ways to distinguish between them. For instance, Rudolph (1996, pp. 26-36) describes the relation of contrast as a broken chain in a causal relation. Similarly, Lerch (cf. Quirk 1954, pp. 6-8) distinguishes between two types of concession: real vs. hypothetical, with the former linked to causal relation, and the latter to conditional relation. Harris (cf. Rudolph 1996, pp. 180-83) proposes a "semantic spectrum" of causal, conditional, and concessive clauses, with varying degree of the strength of the causal link between the dependent clause and the main clause. The clausal link is asserted in the causal clauses, hypothesized in the conditional clauses, and denied in the concessive clauses (ibid). König (1985) notes that the distinction between conditional, concessive conditional, and concessive relations primarily lies in presupposition. While a conditional clause involves no presupposition, concessive clause clearly involves presupposition. Concessive conditional clauses resemble concessive clauses with presupposition implied (König, 1985).

Halliday and Matthiessen's (2004) classification of enhancement relations takes concessive as a subtype of condition, meaning 'if P, then contrary to expectation Q'. Table 2.4 below, which is an extract from the summary of the categories of enhancement and the principal makers provided by Halliday and Matthiessen (2004, pp. 411-12), offers an overview of the concessive relation.

Table 2.4 The concessive type of enhancement and the principal markers (Halliday & Matthiessen, 2004, p. 412)

Category	Meaning	Paratactic	Hypotactic		
			finite	non-finite: conjunction	non-finite: preposition
condition: concessive	if P then contrary to expectation Q	[concession^ consequence] but; (and) yet, still; but + nevertheless [consequence^ concession] (though)	even if, even though, although	even if, even though, although	despite, in spite of, without

As can be seen from Table 2.4, concession with its inherent link with condition and

cause can be realized by paratactic and hypotactic relations. Paratactic concession is typically introduced by paratactic conjunctions *but*, *yet* and *still*. With these conjunctions, the sequence of the two clauses in a paratactic nexus is fixed. Hypotactic concessive clauses can be either finite or non-finite. While hypotactic conjunctions or binders such as *even if*, *even though*, *although* (multivalent conjunctions *while* and arguably *whereas* can also be used to encode hypotactic concession), can introduce both finite and non-finite clauses, prepositions such as *despite*, *in spite of*, *without* introduce non-finite clauses. Unlike paratactic concessive relations associated with fixed sequence of clauses, hypotactic concessive clauses, introduced by binders can precede or follow the main clause or even be enclosed in the main clause. The sequence of clauses in a hypotactic clause nexus in relation to the functional distinction of hypotactic conjunctions will be explored in the empirical study to be reported in Chapter 6.

Another point worth noting in Table 2.4 is that *though*, which is normally hypotactic, can be used to introduce paratactic concessive clauses, but the sequence is fixed, which is a syntactic restriction on paratactic conjunctions. As pointed out by Halliday and Matthiessen (2004, p. 415), "certain conjunctions that are normally hypotactic, especially *when*, *till*, *because* and *though*, often occur in what seems closer to a paratactic function when the enhancing clause follows the primary one". A pair of examples from Halliday and Matthiessen (p. 416) illustrates this point.

- (6) Though Amnesty has long criticized the widespread US use of the death penalty, it found there has now been another worrying. (Text 2)
- (7) I'm not a baker, though I've had to learn how to do it. (KING\_Interviews)

The initial *though*-clause in (6) serves to enhance the subsequent main clause in terms of concession. The two clauses are of unequal status, i.e. hypotactic relation. In (7),

though seems to mark an equal relationship between two clauses, similar to the paratactic but, as in I'm not a baker, but I've had to learn how to do it.

Overall, the distinction between paratactic and hypotactic concession lies in the interdependency relations between the clauses. That is, a concessive relation between two clauses in a paratactic nexus or hypotactic nexus indicates logical opposition regardless of the structural relations between them. For this reason, the hypotactic conjunction *although*, which is a prototypical marker of concessive relation, serves as a fast diagnostic criterion for identifying the concessive use of multivalent conjunctions such as *but* and *yet*. Indeed, the element of logical opposition is a distinguishing feature of concessive relation. In contrast, adversative relation, being a subtype of addition of the extension, does not involve any logical opposition between clauses. The distinction between adversative and concessive relations will be further discussed in Section 2.2.

## **2.1.2.3** The system of CONJUCNTION

As mentioned in Section 2.1.2.1, clause complexing and conjunction are complementary resources of grammatical realization of semantic relations. The system of CONJCUNTION thus draws on the same group of logico-semantic relations of clause complexing (Halliday & Matthiessen, 2004). According to Halliday and Matthiessen, clause complexing, involving structural conjunctions, is confined to the internal organization of each clause complex. They suggest that the clause complex is the most extensive domain of relational organization, whereas the cohesive system of CONJUNCTION, typically involving using conjunctive Adjuncts, has evolved as a complementary resource for creating and interpreting text. It provides the resources for marking logico-semantic relationships that obtain between text spans of varying extent. Before moving on to discuss the system of CONJUNCTION outlined in Halliday and Matthiessen, it is worth mentioning the classification scheme of CONJCUNTION introduced in Halliday and Hasan (1976),

which seems to be the basis of the more refined and complex system of CONJUNCTION in the later work, namely Halliday and Matthiessen (2004).

Halliday and Hasan (1976) consider CONJUNCTION as one type of cohesion in text, the other four being REFERENCE, SUBSTITUTION, ELLIPSIS and LEXICAL COHESION. CONJUNCTION is different from the other four types of cohesion in that conjunctive relations "specify the way in which what is to follow is systematically connected to what has gone before" (Halliday & Hasan,1976, p. 279). The conjunctive relations fall into four categories—additive, adversative, causal and temporal, with the words *and*, *yet*, *so* and *then* "typifying these four very general conjunctive relations" (p. 239). In addition to these relations, Halliday and Hasan made a distinction between external and internal relations. Each of the four relations can refer to two levels or planes: external and internal. The external relations refer to "those which exist as relations between external phenomena," and internal relations refer to "those which are as it were internal to the communication situation" (p. 240).

The basic meaning of the adversative relation is described by Halliday and Hasan (1976) as 'contrary to expectation', which may be derived from the content of what is being said (external plane), or from the speaker-hearer situation (internal plane). Halliday and Hasan's classification of adversative relations is presented in Table 2.5 below.

Table 2.5 Classification of adversative relations (Halliday & Hasan, 1976, p. 255)

Sub-type	Meaning	Conjunctive markers
Adversative proper	'in spite of'	yet, though, only, but, however, nevertheless,
		despite this, all the same
Contrastive	'as against'	but, and, however, on the other hand, at the
		same time, as against that, in fact, actually
Corrective	'notbut'	instead, rather, on the contrary.

As can be seen from Table 2.5, "adversative" was chosen as a cover term by Halliday and Hasan (1976), a fact suggesting that the adversative proper relation meaning "in

spite of" (p. 255) is considered to be more central to the category of adversative relations than contrastive and corrective relations. As will be seen in the system of CONJUNCTION (Halliday & Matthiessen, 2004), the adversative proper corresponds to the concessive relation, which is a subtype of enhancement. The contrastive relation and the corrective relation correspond to the adversative and the replacive subtypes of extension, respectively. As mentioned, the system of CONJUNCTION draws on the same set of logico-semantic relations that clause complexing is developed, which has been reviewed in the previous section. The system of CONJUNCTION in terms of three types of expansion, namely, elaboration, extension and enhancement together with the subtypes are set out in Figure 2.1 below.

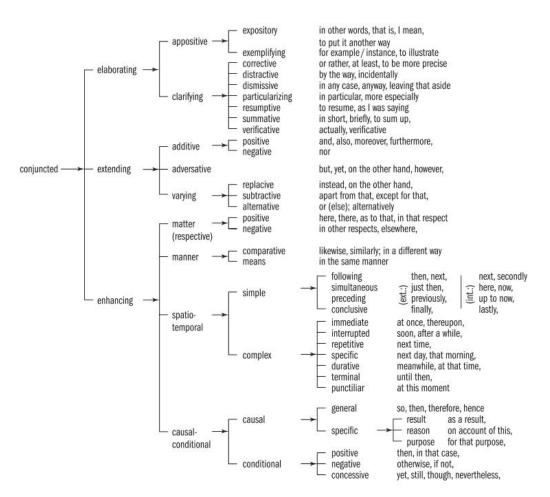


Figure 2.2 The system of CONJUNCTION (Halliday & Matthiessen, 2004, p. 541)

As can be seen from Figure 2.2, conjunctive relations involve using conjunctive Adjuncts, which correspond to linking adverbials in Biber et al's (1999) terminology. Recall from Section 2.1.1 that the function of linking adverbials is "to make semantic connections between spans of discourse of varying length" (Biber et al., 1999, p. 558). Halliday and Matthiessen's (2004) categorization of CONJUNCTION is presented in a way to highlight the interconnections between different subtypes of relations with reference to three different types of relations of expansion. In contrast, the interconnections between different relations in Biber et al.'s (1999) classification seem to be less straightforward. Furthermore, regarding relations of contrast, in its broad sense, Halliday and Matthiessen (2004) make a distinction between adversative and concessive, whereas Biber et al. (1999) consider the two relations to be members of one broad category admitting to the difficulty in disambiguating the two senses. The similarities and differences between the two classification schemes will be further explored in the following section.

## 2.1.3 Comparing different approaches

This section further compares the two approaches to conjunction, namely, traditional accounts of conjunctions and linking adverbials, as represented by Biber et al. (1999) and the treatment of clause complexing and system of CONJUNCTION as complementary resources to realize semantic relations by Halliday and Matthiessen (2004).

As indicated, the most significant difference between traditional grammar description of conjunctions and linking adverbials and the SFL-based approach to conjunction is the difference with respect to orientation. As mentioned, while conjunctions are classified and described mainly in terms of their grammatical properties in traditional accounts, the SFL-based approach emphasizes the semantic relations realized by conjunctions and conjunctive Adjuncts. The two approaches, represented by Biber et al. (1999) and Halliday and Matthiessen (2004), are first summarized in Table 2.6.

Table 2.6 Comparisons of treatment of conjunctions and conjunctive Adjuncts by Biber et al. (1999) and Halliday and Matthiessen (2004)

Biber et al. (1999)		Halliday and Matthiessen (2004)		
Conjunction	coordinator	Conjunction	paratactic conjunction [linker]	Clause complexing
	subordinator		hypotactic conjunction [binder]	(logical)
Adverbial	linking adverbial	Adjunct	conjunctive Adjunct	CONJUNCTION (textual)
	stance adverbial		modal Adjunct	MOOD (interpersonal)
	circumstantial adverbial		circumstantial Adjunct	Transitivity (experiential)

As can be seen from Table 2.6, despite the difference in terminology, some general correspondence can be inferred from the two classification schemes of conjunction and conjunctive Adjuncts (linking adverbials). However, the fundamental difference between the two approaches lies in the fact that while Biber et al. (1999) focus on the distinction between conjunctions and linking adverbials with respect to word class, Halliday and Matthiessen (2004) focus on the explanation of the similar grammatical items with respect to their functions both within the system and in relation to other systems. As mentioned, Biber et al. (1999) approach the distinction between conjunctions and linking adverbials from a traditional formal approach. Conjunctions including coordinators and subordinators are dealt with in the part of function words, suggesting that the descriptions are concerned with their grammatical functions to link or bind clauses at the sentence boundaries. Subordinators serving to introduce adverbial clauses are also discussed in relation to circumstantial adverbials expressing a set of semantic relations including concession and other relations in Biber et al. (1999). However, the link between subordinators and coordinators with regard to semantic relations seems to be less straightforward than Halliday and Matthiessen's (2004) treatment of paratactic conjunction and hypotactic conjunction under the system of clause complexing. Halliday and Matthiessen's system of clause complexing involves two simultaneous sub-systems, i.e. interdependency relations,

which is the contrast between parataxis and hypotaxis and logico-semantic relations of expansion and projection. Conjunctive Adjuncts, being one type of Adjuncts, are part of the system of CONJUNCTION, which serves to mark textual transitions between text spans of varying length (Halliday & Matthiessen, 2004). CONJUNCTION typically involves using conjunctive Adjuncts, but the relation can be left implicit without any conjunctive Adjuncts to mark textual transitions between clause complexes. However, implicit conjunction gives rise to a great deal of indeterminacy and thus is not the focus of the discussion of CONJUNCTION (Halliday, 1985; Halliday & Matthiessen, 2004). They emphasize that the system of CONJUNCTION serves as complementary resource for creating and interpreting text based on the same group of logico-semantic relations of clause complexing. While both resources of clause complexing and CONJUNCTION serve to mark textual transitions, the former is realized by logical metafunction and the latter by textual metafunction (see Figure 2.1 above taken from Halliday & Matthiessen, 2004).

With regard to the classifications of conjunctive Adjuncts (linking adverbials), some apparent differences between Biber et al. (1999) and Halliday and Matthiessen (2004) can be observed. Table 2.7 below matches the semantic categories of linking adverbials in Biber et al. (1999) to those in Halliday and Matthiessen (2004) in terms of three types of expansion.

Table 2.7 Biber et al.'s (1999) classification of linking adverbials compared to Halliday and Matthiessen (2004)

Biber et al. (1999)	Halliday and Matthiessen (2004)		
Enumeration and addition	additive	extension	
(first(ly), in the first / second place, to begin with, in addition, similarly, furthermore)	temporal comparative manner	enhancement	
	comparative manner		
Summation (in sum, to conclude)	summative clarifying	elaboration	

Apposition (in other words, for example,	expository and exemplifying appositive	
that is)		
Result/inference (so, therefore, thus, consequently, then)	causal	enhancement
Contrast/concession (on the other hand,	adversative	extension
alternatively, though, anyway, yet)	concessive	enhancement
Transition (now, incidentally, by the way, meanwhile)	temporal (internal)	enhancement

As can be seen from Table 2.7 and as discussed in Section 2.1.1, Biber et al.'s (1999) classification seems to entail a great deal of overlap between categories. For instance, the 'enumeration and addition' type corresponds not to one type of expansion, but to two types including additive extension (e.g. *in addition, furthermore*), temporal enhancement (e.g. *first* (*ly*), *in the first place, to begin with*) and comparative manner subtype of enhancement (e.g. *similarly*). 'Summation' and 'apposition', which correspond to the elaboration type of expansion, seem to be consistent between two classifications. 'Result/inference' corresponds to casual relation, which is a type of enhancement. However, Biber et al.'s treatment of 'causal' is different from the one by Halliday and Matthiessen (2004). As discussed, Halliday and Matthiessen (2004) consider causal/conditional to be one type of enhancement, suggesting the interconnections between the two relations. Concessive relation is a subtype of conditional, in the sense of 'frustrated cause'. In contrast, Biber et al. (1999) include concession in the category of 'contrast/concession', which is a combination of adversative extension and concessive enhancement.

To sum up, given the research aim of the present study, I adopt the position of Halliday and Matthiessen (2004) as regards what counts as a conjunction and treat both conjunctions and conjunctive Adjuncts as grammatical realizations of semantic relations and use conjunction as a cover term for the two categories. Based on Halliday and Matthiessen's (2004) 'trinocular' perspective, clause complexing represents an intermediate step in the scale of grammatical resources for realizing

semantic sequences of expansion, of which adversative and concessive are subtypes. Above is the system of CONJUNCTION, which serves as complementary resources to create and interpret a text by cohesion. Below is the circumstantial augmentation, which serves to argue semantic relations within a simple clause. The complementary view is the basic motif running through the empirical study of this dissertation.

## 2.2 Further discussion on adversative, replacive and concessive relations: some basic distinctions

The adversative, replacive and concessive relations, which are part of the resources of clause complexing and system of CONJUNCTION in Halliday and Matthiessen (2004) have been discussed at length in the previous section. This section discusses the distinction between these relations further by exploring some other classifications of contrast relations. Given the scope of the present chapter, I will review some basic distinctions proposed by scholars including Mann and Thompson (1988), Lakoff (1971) and Abbott (1972). As will be seen in the discussion below, despite variation in terminology and differences with respect to theoretic orientations, these approaches all recognize several types of relations of contrast and some general patterns of correspondence can be inferred.

## 2.2.1 Antithesis, neutral contrast and concession in RST

Mann, Matthiessen and Thompson developed Rhetorical Structure Theory (RST) as a vehicle for describing the structure of discourse (Mann & Thompson, 1987/1988; Mann & Matthiessen, 1991; Mann, Matthiessen & Thompson, 1992). Central to the structure of discourse is a network of relations that link each part of a text into the whole thereby contributing to text coherence. Overall, twenty-three relations are identified. Three of them are contrastive, including ANTITHESIS, CONCESSION, and NETURAL CONTRAST (Mann & Thompson, 1988). The distinction between the three relations mainly lies in the contrast between the more common sort of nucleus-satellite relation and the multinuclear relation. According to Mann and Thompson (1988), while both ANTITHESIS and CONCESSION are nucleus-satellite

relations, neutral contrast is multi-nuclear.

Mann and Thompson (1988) note that the three relations of contrast in RST, namely antithesis, neutral contrast and concession, "perform different functions for the speaker: inducing a positive regard for one item (antithesis), setting aside an objection (concession), or simply drawing attention to differences (neutral contrast)" (p. 39). They further argue that despite the apparent differences, these relations are similar in that they are sometimes realized by *but* which cannot be used to realize any other RST relation. On the other hand, the fact that only concession is realized by *although*, *yet* or *nevertheless* confirms its distinctness.

#### **2.2.1.1 Antithesis**

According to Mann and Thompson (1988), the antithesis relation is used to present a preference for one action or belief over another similar one. They suggest that antithesis is similar to neutral contrast in that both involve a general notion of contrast. However, being a nucleus-satellite relation, the antithesis relation is mainly employed to increase the hearer's positive regard presented in the nucleus. As an illustration of the antithesis relation, Mann and Thompson (1988) consider the last two clauses of a letter to the editor of *The Christian Science Monitor* (p. 38). The example is quoted below.

- (8) a. Rather than wining them with our arms,
  - b. We'd win them by our example, and their desire to follow it.

Mann and Thompson (1988) consider the example to be consisting of two clauses, with each clause corresponding to a rhetorical unit. Clause a represents the satellite and Clause b represents the nucleus. They give the following comment for the antithesis relation in this example: "by using an antithesis relation, the writer of the letter has been deploring U.S. foreign policy, and suggests that the U.S. should set a

good example of a generous democratic state" (p. 38). Thus, the propositional content conveyed by the nucleus is given preference in an antithesis relation. It is worth noting that the preference given to the nucleus is independent of the order of nucleus and satellite. It is equally possible for the writer of the letter to present the nucleus first: we'd win them by our example, and their desire to follow it, rather than winning them with our arms.

It can be inferred from the discussion in Mann and Thompson (1988) that the antithesis relation corresponds to the replacive relation, which is a variation subtype of extension according to Halliday and Matthiessen's (2004) classification of logicosemantic relations. Recall from Table 2.3 presented in Section 2.1.1.2 the meaning of replacive relation is 'not X but Y'. One piece of evidence is that the signal rather than in example (8) discussed above is a preposition introducing non-finite hypotactic clause, namely Clause a, which is replaced by the main clause, namely Clause b. The corresponding paratactic conjunction is but, as in we should not win them with our arms, but win them by our example, and their desire to follow it. Note that when but is used to signal the replacive (antithesis) relation, it is frequently used with subjectellipsis, or even with a more reduced form as in we should not win them with our arms, but by our example, and their desire to follow it. The conjunctive Adjuncts such as instead, rather and on the contrary can signal the relation as well, as in we'd not win them with our arms. Instead/Rather/On the contrary/, we'd win them by our example, and their desire to follow it. As discussed in the previous section, generally, patterns of agnation hold between hypotactic and paratactic realization, which is logical, and the cohesive sequence, which is textual.

#### 2.2.1.2 Neutral contrast

According to Mann and Thompson (1988), neutral contrast relation is multi-nuclear, with two nuclear spans. As can be inferred from the term 'neutral', in a neutral contrast relation, the writer intends no preference over any of the items in contrast. In

the words of Mann and Thompson, "neutral contrast is used to cause the hearer to understand the particular differences between the two items being presented" (p. 38). They give the following example from *Scientific American* to illustrate neutral contrast relation (p. 38).

#### (9) a. Animals heal,

- b. but trees compartmentalize.
- c. They endure a lifetime of injury and infection
- d. by setting boundaries that resist the spread of the invading microorganisms.

They comment that there is a neutral contrast relation between the first two clauses, i.e. a and b, so that the reader can attend to the differences between healing, which animals do, and compartmentalization, which trees do. The two clauses in a neutral contrast relation are equally nuclear and thus multi-nucleus. The last two clauses, which is a non-finite hypotactic clause nexus of enhancement, serve as elaboration of Clause a.

Clearly, the neutral contrast relation corresponds to the adversative relation in Halliday and Matthiessen (2004). As discussed, the adversative relation means 'X and conversely Y'. Like other semantic relations, adversative relation can be realized by paratactic and hypotactic sequences and cohesive sequences. In addition to *but* which is an extremely versatile marker of contrast, conjunctive Adjuncts such as *in contrast* and *on the other hand* can be deployed to signal this relation, i.e. neutral contrast or the adversative type of extension.

#### 2.2.1.3 Concession

Finally, a third type of contrast identified in RST is concession. Mann and Thompson (1988) note that concession is distinct from both antithesis and neutral contrast because it does not involve the general notion of contrast. As indicated by Mann and

Thompson (1988), the concession relation is used to promote a particular belief or action in the presence of apparent contrary information. The belief or action being promoted is in the nucleus, and the contrary information in the satellite. They illustrate concession with an example from an abstract of an article entitled *Dioxin* in *Scientific American*.

(10) a. Concern that this material is harmful to health or the environment may be misplaced.

b. Although it is toxic to certain animals,

c. evidence is lacking that it has any serious long-term effect on human beings.

As pointed out by Mann and Thompson (1988), the writer of (10) signals that b and c are compatible and acknowledges their potential incompatibility. Since the toxicity to animals, which is the explicit message conveyed by b, often implies toxicity to humans, which is denied by c, b and c are seemingly incompatible. However, with the application of concession, the writer of (10) emphasizes that c, which is the nucleus, is compatible with the information conveyed by the satellite. Mann and Thompson (1988) further argue that acknowledging the compatibility between the nucleus and the satellite is seen by the speaker as a strategy to increase the hearer's positive regard for the situation in the nucleus (p. 39).

Mann and Thompson (1988) mention that concession is typically marked by grammatical items such as *although*, *nevertheless*. Clearly, concession in RST corresponds to the concessive type of enhancement in Halliday and Matthiessen (2004).

#### 2.2.2 Semantic opposition, denial-of-expectation and correction

The semantic opposition and denial-of-expectation distinction of contrast relations based on Lakoff's (1971) seminal work *The if's, and's and but's of conjunction* seem

to correspond to the adversative and concessive relation in Halliday and Matthiessen (2004).

## 2.2.2.1 Semantic opposition

According to Lakoff (1971), semantic opposition is a simple opposition between the propositional contents of two symmetrical clauses. The contrast does not undergo a noticeable change even after the order of clauses is reversed and the meaning is not strikingly affected by replacing the connective with *and* or by removing it completely.

Lakoff (1971) analyzes such examples of semantic opposition:

(11) *John is rich but dumb* (p. 133)

(12) John is rich but Bill is poor (p. 134)

Lakoff (1971) considers the pairs of adjectives and argues that in (11) *rich* and *poor* are antonyms sharing all semantic features but one. The adjectives of the pair *rich/dumb* in (12) share one semantic characteristic in terms of an opposition between approbation and disapproval. The reasons are first richness and dumbness are alike in being able to be the objects of approbation or disapproval: good thing/not good thing; secondly richness and dumbness differ in that one is [+ good thing], the other [-good thing]. Lakoff (1971) further argues that the meaning of the semantic opposition *but* is not unrelated to the presence of presuppositions, but the presupposition is part of the lexical item that is contrasted, rather than residing in the speaker's knowledge of the world, and therefore his expectations.

Similarly, Abbott (1972, p. 15) also identifies the same class of adversative sentences. She compares two similar sentences, (13) and (14), which differ only in the conjunctives and explains in which context each may be used:

(13) Roses are red but violets are blue.

## (14) Roses are red and violets are blue. (p. 15)

Abbott (1972) argues that (14) applying *and* gives a straight report whereas in (13) one observes that the two pieces of information added, namely being red and being blue, is different from each other. According to Abbott, the important characteristic of such sentences is the acknowledgement by the speaker of the difference between two predicates.

## 2.2.2.2 Denial-of-expectation

Apart from semantic opposition, Lakoff (1971) also identifies the denial-of-expectation type of contrast, which involves some background assumption or expectation and differs from the direct semantic opposition discussed above. For instance:

(15) John is tall but he's no good at basketball. (Lakoff, 1971, p. 133)

The propositional content introduced by *but* in (15) is in contrast not with the direct message of the first part of the clause, i.e. *John is tall*, but the assumption evoked, i.e. *John is tall so he should be good at basketball*. Lakoff (1971) argues that the *but*-clause is a composition of an assertion and a presupposition and that the presupposition involves an expectation, which is denied. In addition, Lakoff gives the following example in order to demonstrate that the denial-of-expectation *but* can be changed into a connection with *although*:

- (16) John is a Republican but he voted for Humphrey.
- (17) Although John is a Republican, he voted for Humphrey. (Lakoff, 1971, p. 141)

Lakoff (1971) points out that only certain use of *but* are replaceable by *although*. In particular, the denial of expectation *but* seems to lend itself most naturally to this

change. When the semantic-opposition *but* is replaced by *although*, one finds that, if the sentence is still meaningful, one has inadvertently assumed a denial-of-expectation.

Abbott (1972) describes two different uses of the denial-of-expectation *but*. The first type corresponds to that proposed by Lakoff (1971). According to Abbott, the first type is used to introduce a clause, which is the main point of the utterance, and which the speaker is saying is true despite the truth of whatever is stated in the preceding clause. Abbott argues that this type of denial-of- expectation is the most common sort and that these instances may be paraphrased by omitting *but* and introducing S1 with the subordinating *although*. Abbott illustrates this point with an example from Lakoff (1971).

- (18) John is tall but he's no good at basketball. (Lakoff 1971, p. 133)
- (19) Although John is tall, he's no good at basketball. (Abbott 1972, p. 5)

Abbott (1972) argues that the usual descriptions of the denial-of-expectation *but* seem to indicate that the speaker says S1 and then introduces with *but* a clause, which denies some possible conclusion drawn from S1. The description applies to the second use of the denial of expectation *but*, in which the main point is S1 and the speaker adds S2 in order to make this point more precise:

- (20) Ruth loves Harry, but she doesn't always treat him kindly. (Abbott 1972, p. 5)
- (21) Ruth loves Harry, although she doesn't always treat him kindly. (ibid)

The final although-clause in example (21) serves to prove that the main point in (20) is conveyed by S1 and S2 introduced by *but* only provides an additional piece of information.

Abbott (1972) suggests an extension of the denial-of-expectation *but*: a type of "denial of success" where S2 has to be interpreted as a statement of some action or state which constitutes an impediment to the attainment of a goal toward which the action of S1 seemed to be directed:

(22) John went to Shelia's house, but she didn't want to see him. (Abbott 1972, p. 10)

Abbott (1972) emphasizes that in this type the change of direction in the discourse is important. The conclusion is that the goal was not reached.

#### 2.2.2.3 Correction

In addition to the semantic opposition and denial-of-expectation distinction recognized by Lakoff (1971) and Abbott (1972), Abbott (1972) recognizes a third type of contrast relation, namely, corrective. Abbott observes instances of *but*-constructions that cannot be described as semantic opposition nor as denial-of-expectation. Abbott concedes that the construction might seem at first to be a reduced version, but the difference in meaning can be observed when compared with other *but*-sentences. Abbott suggests the term "Rejected Alternative use of *but*" and discusses many examples, starting from:

- (23) Not John, but Mary did it.
- (24) John's not daydreaming, but thinking.

Abbott emphasizes that it is a characteristic of this construction that if *but* is used, the negated part must always come first.

The corrective relation is also recognized as one type of contrast by Fraser (1998). According to Fraser, contrastive markers divide up on the basis of meaning into the following three sub-categories:

- i) markers that signal that the speaker intends the explicit message conveyed by S2 to contrast with an explicit or implicit message conveyed by S1, including *but*, *however*, (al)though, yet, on the other hand, alternatively, in contrast (with/to this/that), whereas, in comparison (with/to this/that), conversely, nevertheless;
- ii) markers that signal that the speaker intends the explicit message conveyed by S2 to correct a message conveyed by S1, including *instead* (of (doing) this/that), rather (than (doing) this/that);
- iii) markers signal that the speaker intends the explicit message conveyed by S2 to be correct while the message conveyed by S1 to be false such as *on the contrary*

Fraser's (1998) classification seems to focus on "the corrective and non-corrective" distinction. The last two categories, i.e. ii) and iii) can be viewed as corrective, though they differ in that the marker in iii) indicates an absolute correction, or rejection of one in favor of another. In contrast, the first category entails overlapping between adversative and concessive relations. It involves markers that signal a direct semantic contrast, such as *but*, *however*, *in contrast*, *on the other hand* and also inference-based indirect contrast such as *but*, *yet*, *however*.

## 2.2.3 Comparing different classifications

This section has explored the distinction between antithesis, neutral contrast and concession in RST (Mann & Thompson, 1988) and the semantic opposition and denial-of-expectation distinction proposed by Lakoff (1971). These distinctions can shed light on Halliday and Matthiessen's (2004) taxonomy of contrast relations.

As the discussion in this section reveals, generally Mann and Thompson's (1988) taxonomy of contrast relations, which is part of the RST relation network, can be explained with reference to the logico-semantic relations in Halliday and Matthiessen (2004). See Table 2.8 below for the summary of the two classification schemes.

Table 2.8 Summary of relations of contrast in Mann and Thompson (1988) and Halliday and Matthiessen (2004)

Mann and Thompson (1988)		Halliday and Matthiessen (2004)	
antithesis	nucleus -satellite	replacive	extension
neutral contrast	multi-nucleus	adversative	
concession	nucleus -satellite	concessive	enhancement

As can be seen from Table 2.8 and as discussed in this section, Mann and Thompson (1988) highlight the distinct function of each relation with reference to the speaker's intent in presenting the relation and the effect on the reader and hence a distinction is made between nucleus-satellite and multi-nucleus relations. Mann and Thompson (1988) note that while patterns of realizations are used as clues to help identify relations, the distinctions between different rhetorical relations are functional rather than realizational. In contrast, Halliday and Matthiessen (2004) discuss semantic relations in the context of clause complexing and CONJUNCTION as complementary resources to realize semantic relations. Clause complexing involves using structural conjunctions, whereas CONJUNCTION involves the use of conjunctive Adjuncts. Implicit CONJUNCTION, although recognized, is not the focus of their discussion in Halliday and Matthiessen (2004). The complementarities between the two frameworks, i.e. SFL and RST, can also be brought out by Matthiessen's (2011) classification of RST relations according to the typology of logico-semantic relations. See Figure 2.3 below.

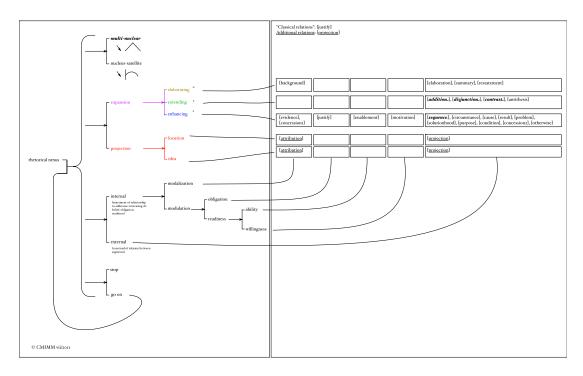


Figure 2.3 Classification of RST relations according to the typology of logicosemantic relations (Matthiessen, 2011)

On the other hand, Lakoff's (1971) study of *but* focuses on clarifying the distinction between semantic opposition and the denial-of-expectation, which corresponds to Halliday and Matthiessen's (2004) adversative and concessive relation, respectively. However, since Lakoff (1971) as well as Abbott (1972) tend to focus on the functions of *but* in exploring relations of contrast, the classification will not be referred to in the empirical study of the thesis.

As indicated, the present study follows Halliday and Matthiessen's (2004) classification of clause complexing and system of CONJUNCTION to investigate a group of adversative and concessive conjunctives. However, as indicated by Halliday and Matthiessen (1999; 2004), indeterminacy is a fundamental principle of natural language, which makes it extremely difficult to group grammatical items into absolute categories. The classification of adversative and concessive conjunctions (clause complexing) and conjunctive Adjuncts (the system of CONJUNCTION) proposed by Halliday and Matthiessen (2004) serves as the basis of corpus-based investigation of

lexicogrammatical patterns which may be significant for interpreting semantic relations. The contribution of RST will be explored in the text-based analysis of adversative and concessive conjunctions.

# 2.3 Empirical studies on the use of conjunctions and linking adverbials in EFL writing

This section reviews relevant research on the use of conjunctions and linking adverbials in EFL writing. As indicated by the section heading, a substantial amount of research has been carried out within the context of traditional grammar, which tends to focus on the forms rather than functions of grammatical items. Thus, it is not surprising to find that much of the research on this topic has been concerned with the problem of overuse, underuse or misuse of conjunctions or linking adverbials. Some fundamental problems with previous research will be summarized after reviewing a number of studies on this topic.

Following Halliday and Hasan's (1976) classification of conjunctive relations, Granger and Tyson (1996) studied the connector usage in essay writing by advanced French learners of English, they found no overall overuse of connectors by the French learners, but showed that the learners use additive connectors much more frequently than adversative connectors. As they note, students overuse connectors which add to, exemplify, or emphasize a point, rather than those which change the direction of the argument or take the argument logically forward (Granger & Tyson, 1996).

Altenberg and Tapper (1998) examined the use of linking adverbials, in the sense of Biber et al. (1999), in advanced Swedish learners' written English and compared it with that in comparable types of native Swedish and native English writing. Their study produced the following three major findings: i) Generally, Swedish learners tended to underuse linking adverbials in comparison with native English students. Specifically, they tended to use more appositive linking adverbials than native students but fewer resultive and adversative adverbials; they tend to underuse those

linking adverbials which belong to formal registers (*therefore, thus, however* and *yet*); ii) Swedish learners had stronger preference for initial position than the English students and a corresponding weaker preference for medial position. They argue that the divergence between the NS and the NNS output is largely due to the learners' lack of an awareness of formality and register, rather than negative transfer from their first language.

Intaraprawat and Steffensen (1995) analyzed meta-discourse (which includes linking adverbials) in persuasive essays written by 12 ESL university students in the United States. They found that there were more linking adverbials in the good essays than in the poor essays. The authors concluded that skilled writers had an awareness of the needs of their readers and control strategies for making their texts more accessible to the reader, and the poor writers, on the other hand, were not able to generate reader-friendly texts.

Field and Yip (1992) use an experimental approach to study 'internal conjunctive cohesion' in the ESL writing of senior secondary/high school students at Form Six Level in Hong Kong. In this study they compare the use of connectors and other cohesive devices in the essays of three groups of Hong Kong students with those used in the essay of 'L1' students from Sydney, Australia. Following Halliday and Hasan (1976), the authors adopt a four-way classification of cohesive devices in terms of additive (also, and, furthermore, etc.) adversative (but, however, on the other hand, etc.), causal (hence, thus, etc.) and temporal categories (next, etc.). The results of Field and Yip's analysis suggest that 'L2' writers from Hong Kong tended to 'overuse' such devices compared with the L1 Australian group, and they comment that: "The high frequency of devices in L2 and even in L1 scripts may be due to the limited time provided for completion of the task. Content had to be devised quickly and writers may have relied on organizational devices to shape the essay rather than a strong development of their thought. The educational level of the writers, who would have

little essay writing experience, may also account for an overall high use" (Field & Yip 1992, p. 24).

Milton and Tsang (1993) adopted a corpus-based approach to the study of student writing, drawing on data which at that time formed part of a four million- word corpus of learner English, the Hong Kong University of Science and Technology (HKUST) corpus of learner English. Milton and Tsang's study attempts to compare the use of connectors among Hong Kong students with that included in three 'native-speaker' corpora, i.e. the Brown Corpus, the London Oslo/Bergen (LOB) Corpus, and another corpus of their own which consists of computer science textbooks. Following the categorization of Celce-Murcia and Larsen-Freeman (1983), Milton and Tsang chose to study the occurrence and distribution of 25 single word logical connectors, which they classified as additive (also, moreover, furthermore, besides, actually, alternatively, regarding, similarly, likewise, namely), adversative (nevertheless, although), causal (because, therefore, consequently), and sequential (firstly, secondly, previously, afterward(s), eventually, finally, lastly anyhow, anyway). On the basis of the comparison of results from the HKUST corpus and the L1 corpora, the researchers identified 25 connectors which are regularly overused by Hong Kong students, i.e. also, moreover, furthermore, besides, regarding, namely, nevertheless, although, because, therefore, firstly, secondly, lastly. In their conclusion, Milton and Tsang reiterate that, in the writing of Hong Kong students '[t]here is a high ratio of overuse of the entire range of logical connectors in our students' writing, in comparison to published English' although they also concede that distributional patterns may also be affected by such factors as 'genre' and 'variety' (Milton & Tsang 1993, p. 239).

Some fundamental problems with the above-mentioned studies on conjunction and linking adverbials in EFL writing can be detected. It is interesting to notice that in their accounts of linking adverbials, most of them tend to focus on a pre-defined list of linking adverbials to the exclusion of almost all structural conjunctions. This seems

to suggest that researchers believe that the appropriate use of linking adverbials is a more important indicator of good writing.

The study of linking adverbials is mostly approached from a structural-traditional perspective and relies on ready-made classifications defined by traditional grammars. Emphasis has also tended to be placed on the quantitative aspects of linking adverbials in the writing of EFL learners in comparison with native-speakers, as they report problems of overuse or underuse. However, the quantitative analysis maybe of limited value for interpreting the use of the linking adverbials investigated. Moreover, since most of these studies do not follow the same list of linking adverbials, the results are not directly comparable with each other. Therefore, even from a quantitative perspective, the findings of these studies cannot serve as reliable evidence for pedagogical interventions.

Admittedly, some researchers do include qualitative discussion of linking adverbials investigated to complement the quantitative frequency analysis. However, since they tend to rely on ready-made classifications, it is not ensured that the identified linking adverbials are actually characteristic of the relation; they might very well occur just as frequently in other relations. Thus, without investigating the lexico-grammatical features that accompany these linking adverbials, these studies may be inadequate in accounting for the problems EFL learners encounter.

Moreover, because almost all of these studies deal with linking adverbials of different semantic categories, their discussion on individual relation is not detailed or comprehensive enough. In fact, there is little research that examines the use of a single category of linking adverbials or structural conjunctions or both in EFL writing. Considering this inadequacy, the present study attempts to extend the scope of early studies by investigating the use of adversative and concessive conjunctives in the writing of Chinese EFL learners as compared with native-speaker writers.

## **Chapter 3 Methodology**

As indicated in Chapter 1, the present study combines corpus-based techniques with discourse analysis to investigate a group of adversative and concessive conjunctions in English texts written by Chinese EFL learners and native-speakers. This chapter provides a detailed description of the combined method adopted in this study.

This chapter is organized as follows. Section 3.1 presents a detailed description of the data, namely, the Chinese English learner corpus and the comparable native-speaker corpus, highlighting the justifications for using the two corpora for a comparative purpose. Section 3.2 provides an account of the method adopted, focusing on the complementarities between corpus-based methodology and text-based analysis.

#### 3.1 Data Description

As indicated, the focus of the corpus-based study is how a group of adversative and concessive conjunctions are used in English texts written by Chinese EFL learners and their native-speaker counterparts. The method adopted here belongs to the type of contrastive inter-language analysis (see Granger 1996 and Gilquin 2000/2001), which compares learner data and native-speaker data to find out the characteristics of inter-language, *i.e.* how it converges to or deviates from native-speaker usage. For example, learners may misuse, overuse or underuse certain words, phrases, collocations, grammatical constructions, etc., relative to native speakers (Granger, 1998). As Granger (2002) suggests, native corpora are often of little value for pedagogical decisions unless they are complemented by learner corpora. Learner corpora can give indication of the difficulty learners may have with the use of words under investigation (ibid). Biber et al. (1998) also note that concordance sets are generally much better explained when seen in contrast. The comparative nature of the corpusbased study implies that the investigation is based equally on the learner data and

native-speaker data.

However, in order to make reasonable judgments on whether a certain conjunction is misused, overused or underused by Chinese EFL learners, it is important to ensure that the learner data and the native speaker data are comparable in terms of mode, genre and field, etc. Thus, the first step in the present study is to decide on an appropriate learner corpus and a comparable native-speaker corpus. A brief introduction to the corpora used including the reasons why they are chosen is given below.

### 3.1.1 Learner corpus used: CLEC

The learner corpus data comes from the Chinese English Learner Corpus (Gui & Yang, 2003). The CLEC corpus was compiled collaboratively by researchers from Guangdong Foreign Studies University, Shanghai Jiao Tong University, and some other universities from China under the leadership of Gui Shichun and Yang Huizhong. The corpus has been available since its publication by Shanghai Foreign Language Education Press in 2003. The corpus contains 1 million words of English compositions collected from Chinese learners of English with different levels of proficiency, covering senior secondary school students, English-major, and non-English-major university students in China. Based on the classification of proficiency levels, the CLEC corpus is divided into 5 sub-corpora of similar size: ST2, ST3, ST4, ST5 and ST6, as presented in Table 3.1 below on the next page.

Table 3.1 Composition of the CLEC corpus

Sub-corpus	Level of proficiency	Size (total number of words)
ST2	Senior high school students	25, 1353
ST3	Non-English major freshmen and sophomores	23, 2575
ST4	Non-English major juniors and seniors	24, 1979
ST5	English major freshmen and sophomores	23, 8020
ST6	English majors juniors and seniors	24, 4025

As can be seen from Table 3.1, the CLEC corpus is more or less balanced among learners of five levels of proficiency. However, with respect to the use of adversative and concessive conjunctions, the CLEC corpus exhibits very little variability among learners of different levels of proficiency. Therefore, the distinction between learners of different proficiency levels within CLEC will not be explored and the CLEC corpus will be consulted as a comprehensive collection of learner language produced by a large population of Chinese EFL learners. Indeed, CLEC is by far the largest EFL learner language corpus in terms of size in China. The characteristics of adversative and concessive conjunctions emerging from the corpus analysis can be extended to account for the problems Chinese EFL learners encounter in using these conjunctions. For this reason, the CLEC corpus constitutes an excellent source of data for the investigation of adversative and concessive conjunctions in English texts written by Chinese EFL learners.

Another justification for choosing CLEC concerns the dominant text type represented by the corpus. The texts in CLEC, as mentioned above, are compositions written for language proficiency by Chinese EFL learners. Although the topics of the compositions are varied, most of them are argumentative texts in which the writer needs to argue for a viewpoint regarding a particular issue, such as global shortage of fresh water and job-hopping. Argumentation constitutes the core text type of writing

at university level in China. For instance, the writing tasks of the national English language proficiency tests, including college English tests band 4 and band 6 for non-English major university students and test for English majors band 4 and band 8, require students to write argumentative texts. The length of the text ranges from 150 words to 500 words depending on the level of the test. The prevalence of argumentative writing at university level in China indicates that CLEC is representative of Chinese EFL learner writing. In addition, because argumentative texts typically involve opposition between different views, they are especially suitable for the investigation of adversative and concessive conjunctions. In the words of Hyland (2005, p. 175), "argumentative texts involve 'positioning' whereby the writer expresses his viewpoint on a particular issue against some other different viewpoints held by others". Very often, the writer's point of view is highlighted by information following an adversative or concessive conjunction. This highlighting function can be viewed as the basic discourse function of adversative and concessive conjunctions. However, this basic function is subject to variation depending on a range of factors. These factors influencing the discourse functions of adversative and concessive conjunctions in argumentative texts written by Chinese EFL learners as compared to those written by native-speakers constitute the main research topics of the present study.

A final point worth noting about CLEC is that it is coded for different types of errors. The errors are coded according to a marking scheme of 61 types of errors. The complete version of the error-tagging scheme is provided in Appendix 1. The identification of errors was a major contribution of CLEC to raising awareness of features of Chinese EFL inter-language at the time when it was complied. As Granger (2009) pointed out, one obvious advantage of error-tagging is that it makes it easier to notice inter-language features. However, while the errors that are not associated with adversative and concessive conjunctions are beyond the scope of the present study, the errors of adversative or concessive conjunctions tagged in CLEC are far from

being adequate to account for problems learners may encounter in using these conjunctions. As indicated by Granger, because error tagging always reflects a certain theoretic perspective that may not be shared by the teacher or other researchers, mistagging or inconsistencies are inevitable. The problematic aspect of the error tagging associated with adversative and concessive conjunctions in CLEC will be briefly discussed below.

According to the error coding scheme of CLEC, error-tags relevant to adversative and concessive conjunctions belong to two categories, i.e. conjunction and sentence, as summarized in Table 3.2 below.

Table 3.2 Classification of error-tags relevant to conjunctions in CLEC

TAG	CATEGORY	TYPE	EXPLANATION
cj1	conj	pattern	unacceptable combination
			with other
			words/grammatical
			error in the formation or
cj2 conj set phrase	set phrase	use of a phrase	
CJ2	conj	set piliase	functioning as a
			conjunction
sn1	sentence	run-on sentence	improper addition of
			clauses/fused sentence
sn2	sentence	sentence fragment	subordinate clause as a
			sentence/ any phrase as a
			sentence
sn8	sentence	structural deficiency	error in the grammatical
			construction of a
			sentence: improper
			splitting, pattern shifting,
			confusing structure, etc.

As indicated by the explanations of the error tags presented in Table 3.2 above, the distinction between cj1 and cj2 in the category of conjunction is not clearly stated. Similarly, there is no clear distinction between the sub-types of errors at sentence-level, *i.e.* Sn1, Sn2 and Sn8, as they are all concerned with the problematic structure of the sentence containing conjunctions. Thus, the decision to assign appropriate error tags to errors of adversative and concessive conjunctions identified in the corpus can be very difficult to make, which may lead to mis-tagging or inconsistencies.

But before moving on to the limitations of the error-tagging scheme in CLEC, the structure of error-tags needs to be pointed out. An error-tag consists of two parts: i) abbreviations indicating the category of the error and the number indicating the subtype of the error tagged; ii) information showing the position of the error and its scope. For instance, [cj2, s-] in example (1) below is an error tag associated with the conjunction *but*, indicating both the subtype of the error within a category and the position of the error.

(1) So, not only the life expectancy but only [cj2,s-] the infant mortality has clear [wd2,1-1] [wd3,1-1] change [vp9,2-]. (CLEC)

While "cj2" indicates that the error is due to the incorrect use of the conjunction as a set phrase, "s-" shows the scope of the error. The scope of the error identifies both the position of the error which is represented by "-" and the unit before and after the error. In the case of [cj2, s-], the unit after the error is a sentence and thus "s" means that that the error is followed by a sentence. The second part of the error-tag but by its nature it is independent of the category or the type of the error. Given the nature of the second part of the tag, it is less relevant to mis-tagging or inconsistency. On the other hand, the first part of the error tag, *i.e.* the part that indicates the category and type of the error is more likely to subject to mis-tagging and inconsistency. For instance, mis-tagging can be illustrated by the error tag of *although*, *i.e.* [cj2,-] in example (2) below.

(2) Although [cj2,-] most of students regarded that material [wd3,-] of architecture major is not good as their dreams. (CLEC)

Clearly, the ungrammaticality of (2) is due to the incorrect use of the hypotactic conjunction *although*. However, it is not caused by its unacceptable combination with

other words, as indicated by the error tag [cj2,-]. Instead, it is an error due to "sentence fragment" categorized in Table 3.2 and thus the corresponding error-tag should be [sn2,-] rather than [cj2,-].

Apart from problems of mis-tagging, inconsistency is another major limitation of the error-tagging scheme in CLEC. For instance, cases of inconsistency can be illustrated by a pair of examples below.

- (3) Whereas [wd5,-], as if [wd3,-s] you don't haste to look for a job. (CLEC)
- (4) Whereas [cj1,-s], Mother won't believe in me. (CLEC)

Both cases of *whereas* are misused due to structural deficiency at sentence level. That is, as a hypotactic conjunction, *whereas* cannot be used to introduce a finite clause without the main clause, as in (4) or another hypotactic clause introduced by *as if*, as in (3). Thus, while the two cases of *whereas* are misused in a similar way, tagging them as two different types of errors, *i.e.*, [wd5,-] and [cj1,-s], results in inconsistency. In addition, as discussed above, the errors in examples (3) and (4) should be categorized as sentence-level errors and thus [sn2,-] would be a more appropriate error tag, according to the coding scheme.

Finally, it is important to note that not all errors of adversative and concessive conjunctions can be classified into the categories or types recognized by the error-coding scheme of CLEC. For example, in cases like (5) when the misuse of a cohesive conjunction, traditionally known as linking adverbials, is not associated with the grammatical role assumed by structural conjunctions, the error-tag is of little value for understanding the nature of the error.

(5) Sometimes, they don't stop smoking until they die. So they must [vp9,0-5] spend much money from [vp2,3-1] smoking. On the contrary, [cj1,6-7] smoking just does

Due to the limitations of the error-tagging schemes in CLEC mentioned above, the present study investigates the use of adversative and concessive conjunctions from a different perspective. That is, instead of focusing on the errors of adversative and concessive conjunctions made by Chinese EFL learners, it compares and contrasts the use of adversative and concessive conjunctions in English texts written by Chinese EFL learners and native speakers.

#### 3.1.2 Native-speaker corpus used: BAWE-E

In view of the comparative nature of the research, the study also makes use of one comparable native speaker corpus — British Academic Written English Corpus (Nesi & Thompson, 2007).

The British Academic Written English (BAWE) corpus contains 2,761 proficient student assignments, produced and assessed as part of university degree coursework, and fairly evenly distributed across 35 university disciplines and four levels of study (first year undergraduate to Masters Level). About half the assignments were graded at a level equivalent to 'distinction' (D) (70% or above), and half at a level equivalent to 'merit' (M) (between 60% and 69%). The majority (1,953) were written by L1 speakers of English. Texts have been categorized into 13 broad genre families, including "essays", "critiques", "case studies", "explanations", "methodology recounts", "problem questions" and "proposals".

However, in order to keep the native-speaker corpus comparable with the learner corpus in terms of text type, I decided to focus on essays in BAWE, hereafter BAWE-E. The BAWE-E contains 3 million words, which is half the size of BAWE. Consequently, BAWE-E represents a better comparable corpus than the original BAWE in terms of text type and size.

#### 3.2.3 Compatibility between CLEC and BAWE-E

To have a better view of the compatibility between the learner corpus and the native speaker corpus, the two corpora used in the study are compared along several key parameters including first language, text type, proficiency level and corpus size. Learner Corpora around the World (see further https://www.uclouvain.be/en-cecl-lcworld.html) is consulted for comparing the corpora used in this study. The key parameters for comparison are highlighted in Table 3.3 below. Sources of imbalance between the corpora are noted and solutions are proposed to reduce the impact of the potential imbalance of the corpora.

Table 3.3 Comparisons between CELC and BAWE-E along some key parameters

Corpus	Target	First	Text type/ task	Proficiency	Size
	language	language	type	level	
CLEC	English	Chinese	Mainly argumentative essays	4 levels of proficiency (senior secondary school students, English-major, and non-English-major university students)	1 million
BAWE-E	English	Mainly L1 speakers but also includes data produced by L2 speakers	Essays of academic writing	4 levels of study (from undergraduate levels to final year and taught masters level)	3 million

As shown in Table 3.3 above, CLEC and BAWE-E are compared along the dimensions of first language, text type, proficiency level and corpus size.

First, with respect to first language, the difference between CLEC and BAWE-E is necessitated by the research aim of the study, *i.e.* to compare the use of adversative and concessive conjunctions in texts written by Chinese EFL learners with those written by native-speaker.

Secondly, regarding text type, CLEC is slightly different from BAWE-E. While CLEC comprises argumentative essays written for language proficiency, BAWE-E consists of essays of academic writing. However, the difference between argumentation and academic writing is becoming blurred in the investigation of adversative and concessive conjunctions and thus the reliability of the findings will not be influenced. Moreover, since argumentation constitutes the core elements of academic writing, the BAWE-E corpus is comparable to the learner corpus CLEC in terms of text type.

With regard to proficiency levels, both CLEC and BAWE-E represent the writings of students of four different proficiency levels. The difference lies in the fact that while CLEC includes essays written by senior secondary students, BAWE-E includes productions from taught masters. However, as university-level students produce the majority of the texts in both corpora, the decision to compare texts written by Chinese EFL learners with those written by native-speaker university-level students is justifiable.

A final point surrounding the issue of compatibility is the relative size of the two corpora. As shown in Table 3.3, BAWE-E is bigger in size than CLEC. However, the imbalance can be easily solved with the technique of normalized frequency in discussing the relative frequency of certain patterns emerging from the corpora. Moreover, since adversative and concessive conjunctions are not high-frequency grammatical features such as pronouns and verb forms, a small native-speaker corpus may not be adequate to provide insight into the features of the conjunctions under investigation. Therefore, motivated by the unwritten assumption that 'biggest is best' (Kennedy, 1998), the study adopts a relatively larger native-speaker corpus, *i.e.* BAWE-E.

Admittedly, imbalances between the two corpora are unavoidable, such as size and

genre discussed above. As Baker (2004, p. 171) notes, such imbalances 'are not specific to corpus-based studies', but are rather inherent in 'any attempt to look for similarities and differences', where aspects of comparison 'can never be totally balanced in every respect'. In other words, I am aware that in some aspects the two corpora might not be considered as a perfect match for comparison. I admit that there are some differences between the two corpora, but I want to emphasize that they are used on practical grounds. Taking into account both availability and features of each corpora, CLEC and BAWE-E are consulted as the major sources of data. As mentioned, CLEC represents the writings of the largest population of Chinese EFL learners. The corpus can thus be exploited to uncover the characteristics of adversative and concessive conjunctions used by Chinese EFL learners. On the other hand, BAWE-E is chosen as the native-speaker corpus because it represents the target genre of Chinese EFL learners. Although the text type represented by CLEC is not academic writing in the strict sense, argumentation constitutes the basic element of academic writing. Moreover, writers represented by BAWE-E and CLEC are about the same age group so that the native-speaker productions in BAWE-E are more accessible to Chinese EFL learners than published essays by native-speakers.

#### 3.2 An account of the combined method

A central issue in the present study is to uncover the systemic patterns of adversative and concessive conjunctions instantiated in the learner corpus and the comparable native-speaker corpus. Motivated by the concern with probability profiles and systemic potentials, the study adopts corpus-based methodology complemented by discourse analysis along the lines suggested by Matthiessen (2006). This section provides an account of the combined method to highlight its effectiveness for addressing the research questions of the present study presented in Chapter 1.

The combined method involves three macro-steps, each addressing one specific question. An outline of these steps is presented below:

Step 1: providing an overview of a total number of seventeen adversative and concessive conjunctions across the two corpora in terms of overall frequency, positional distribution and distribution of semantic categories.

Step 2: providing the in-depth systemic functional analysis of four individual conjunctions in two corpora, focusing on the interconnections between syntactic positions, co-occurrence patterns and semantic relations encoded by these conjunctions;

Step 3: exploring the instantiation patterns of adversative and concessive conjunctions in full-length texts written by Chinese EFL learners.

The first step is based on the concordancing search of words, *i.e.* a predefined set of adversative and concessive conjunctions, in the learner corpus and the native-speaker corpus to find out their frequency and positional distributions. A fundamental issue then concerns the selection of conjunctions to be covered in the quantitative analysis. Ideally, the list of conjunctions to be covered should be as comprehensive as possible in order to provide a basis for establishing the systemic probability profiles of conjunctions expressing adversative, replacive or concessive relations. In other words, the frequency and positional distributions of each conjunction under investigation needs to be examined in relation to that of other potentially equivalent or similar conjunctions. Driven by this goal, a wide range of English dictionaries (e.g. *Collins COBUILD English Dictionary; Longman Dictionary of Contemporary English*) and grammar books (e.g. Biber et al., 1999) were consulted to supplement the classification of adversative, replacive and concessive relations made in Halliday and Matthiessen (2004) (see Chapter 2, Section 2.1 for the critical review of the theoretical approaches to conjunction).

A total number of seventeen conjunctions including both structural and cohesive ones that are typically used to mark the adversative, replacive and concessive types of expansion are identified. See Table 3.4 below for the list of conjunctions in the textual and logical metafunctions. With the exception of but, instances of non-conjunctive use of the conjunctions listed in Table 3.4 are eliminated (e.g. instances of still and yet as interpersonal Adjuncts of time). Criteria for delimiting the conjunctive use of multifunctional conjunctions is based on the formal properties associated with their conjunctive and non-conjunctive uses, which will be further discussed in Chapter 4. In addition to these conjunctions, a total number of 6 prepositions and preposition groups, which function as circumstantial realization of adversative, replacive and concessive relations, are also identified. For instance, circumstantial elements in comparison +NP, instead of +NP, in spite of +NP function as metafunctional agnates of adversative, replacive and concessive relations marked by but, on the contrary and although in the logical or textual metafunctions. Note that, strictly speaking in comparison to/with and in contrast to/with do not belong to the adversative type of extension, according to Halliday and Matthiessen's (2004) classification of circumstantial elements. They are regarded as the 'manner' subtype of enhancing in the sense of 'like' or 'unlike' (p. 262). However, the relation they encode seems to shade into the adversative subtype of extending as in contrast or in comparison, as reflected by the similar wording, i.e. in contrast vs. in contrast to /with. For purposes of comparison and convenience, in comparison to/ with and in contrast to/with are categorized as circumstantial elements realizing adversative subtype of extension in Table 3.4. Moreover, it needs pointing out that the circumstantial elements are identified not because of their function to mark relations by circumstantial augmentation, but because of their potential to offer insights into the choices of conjunctions. That is, the frequency of circumstantial elements is identified for purposes of comparison with that of conjunctions. As mentioned, the present study adopts a multi-faceted view of clause complexing suggested by Matthiessen (2002), who examines clause complexing in relation to its metafunctional 'neighborhood' (p.

239), i.e. circumstantial augmentation within the experiential system of transitivity and cohesive sequences within the textual system of CONJUNCTION. Some multivalent adversative and concessive conjunctions need to be explained with reference to their circumstantial agnates.

Table 3.4 Markers of adversative, replacive and concessive relations (adapted from Matthiessen, 2002; Halliday and Matthiessen, 2004)

		textual	logic	al	experiential
		clause	clause n	exus	clause
		CONJUNCTION between clause complexes (non- structural)	INTERPEPENDENCY between clauses in clause nexus		CIRCUM -STANTIATION
			para-tactic	hypo-tactic	
elaboration					
extension	adversative	however, but, yet, in contrast, in comparison, on the other hand, at the same time, conversely	<u>but</u> , <u>yet</u>	while, whereas	in comparison to/with*, in contrast to/ with*
	replacive	instead, rather, on the contrary	but		instead of, rather than
enhancement	concessive	however, yet, but, still, nevertheless		although, though, while, whereas	despite, in spite of

As shown in Table 3.4, unlike prepositions and preposition groups in the experiential metafunction on the right side, which shows rather stable relationship with the types of expansion encoded by them on the left, cohesive and structural conjunctions in the textual and logical metafunctions show much overlapping both in terms of the types of expansion and metafunctions. For instance, in terms of types of expansion, *but*, *however* and *yet* can be used to indicate either the adversative sub-type of extension or

the concessive sub-type of enhancement. Note that but is also arguably a marker of replacive relation, which is typically associated with negative polarity (Halliday & Matthiessen, 2004). This point will be further discussed in Chapter 5. The hypotactic conjunctions while and whereas encode either concessive enhancement in the sense of although or adversative extension in the sense of on the other hand. Note that while is also frequently used to encode temporal enhancement. The multivalent nature of while will be further explored in Chapter 6. In terms of metafunctions, the paratactic conjunctions but and yet in the logical metafunction can be used cohesively thereby extending their uses into the textual metafunction. Indeed, the overlapping illustrated by these conjunctions can be seen as instances of 'systemic indeterminacy', which is the fundamental principle of natural language (Halliday & Matthiessen, 2004, p. 173; Halliday & Matthiessen, 1999, p. 547). However, compared with the indeterminacy and hence difficulty of categorizing the conjunctions into definite types of expansion in the absence of reliable contextual clues at this stage, the structural and cohesive distinction of conjunctions and the corresponding metafunctional distinction can be made on their distinct syntactic features.

The popular concordance program *Wordsmith Tools* (Scott, 2008) is applied for the search of each conjunction identified. The quantitative analysis aims to provide a general probability profile of adversative and concessive conjunctions in terms of overall frequency, distribution of inter-dependency types, distribution of semantic categories, positional distributions across the two corpora. Frequencies of circumstantial elements in the two corpora are also identified for comparison with those of conjunctions. Note that the quantitative analysis at this stage does not distinguish between the specific functions of individual conjunctions under consideration in the absence of reliable contextual clues and thus the semantic distribution only provides a starting point for more in-depth analysis. However, even without much discussion of the qualitative aspects of the use of the adversative and concessive conjunctions, the overview can reveal some interesting findings about the

use of these conjunctions by two groups of writers in terms of unmarked and marked choices.

The second step, while still relying on the concordancing search of words, does not study words in isolation, but examines clauses in which the conjunction in question occurs. Wordsmith tools 5.0 (Scott, 2008) is applied to generate concordance lines of the conjunctions under investigation, which involves manual sorting and classification of the recurrent patterns associated with these conjunctions. These patterns are highlighted for interpreting the functions of the conjunctions under investigation. The analysis at this stage is systemic functional in that it involves analysis of conjunctions as grammatical realizations of semantic relations. However, for practical reasons, the scope of analysis is narrowed down to four conjunctions, namely, but, while, however and on the contrary, representing paratactic, hypotactic and cohesive conjunctions in the textual and logical metafunctions. These conjunctions are arguably representations of three sub-types of expansion, i.e. adversative, concessive and replacive. They are selected for further analysis mainly because of their multivalent nature, which begins to emerge even at the first stage of analysis. The focus of analysis is on syntactic positions, co-occurrence patterns associated with these conjunctions and their relevance for the type of semantic relations encoded. The conjunctive Adjunct on the contrary represents an exceptional case in that two functional types emerge from both corpora, which has not been described in the literature. As suggested by Biber (2010, p. 168), "linguistic categories and units that have not been previously recognized" emerging from native-speaker corpus deserves to be explained in great detail. The two types of on the contrary are explained with reference to thematic structures to shed light on their different textual functions.

The third step, which constitutes the last step in the investigation of adversative and concessive conjunctions in the present study, focuses on the instantiation patterns of adversative and concessive conjunctions in full-length texts written by Chinese EFL

learners. The analysis seeks to identify the potential areas of difficulty experienced by Chinese EFL learners in the realization of semantic relations of contrast and concession at text level. One unique feature of the text-based analysis is that it is not constrained to adversative and concessive conjunctions. As Halliday and Matthiessen (2004, p. 33) argue, each grammatical unit is an 'organic configuration', with every element performing a distinctive function in relation to the whole. The text-based analysis thus takes into account all potentially relevant lexico-grammatical recourses with a view to identifying the interactions between different systems within the stratum of lexicogrammar as well as the interconnections between lexicogrammar, semantics of the content plane and the stratum of context. Specifically, text-based analysis aims to illustrate the contribution to text organization of thematic structures marking textual status and clause complexing and conjunction marking textual transition. Due to the increase in labor intensity, the text-based analysis is limited to one full-length text taken from the learner corpus. However, it needs pointing out that the reduction in the volume of data does not compromise the validity of the analysis. As Matthiessen (2006) suggest, the volume of text that can be processed decreases as we ascend the hierarchy of stratification and the rank scales within each stratum. Richer analysis, i.e., higher level of analysis is constrained to a lower volume of data. Matthiessen further argues that the limit is not theoretical, but practical. In other words, large-scale higher level of analysis is feasible as long as the research is given sufficient support. However, given the scope of the present study, we leave this issue as a concern of future research.

The combined method adopted in the present study is illustrated diagrammatically in Figure 3.1 below. The diagram draws on Matthiessen (2006) with some modifications made to fit it into the present investigation of conjunctions. Matthiessen highlights the complementarities between lower level corpus-based analysis and higher-level text analysis in a project, which aims to establish the probability profiles of the key systems of the lexicogrammar of English. As suggested by Matthiessen, the general

methodological point behind the 'two-pronged' approach, *i.e.* small sample manual analysis and large sample analysis of patterns of orthographic words, is that the view 'from below', based on graphological patterns, only allows us to see a relatively small part of what can be analyzed manfully 'from above'.

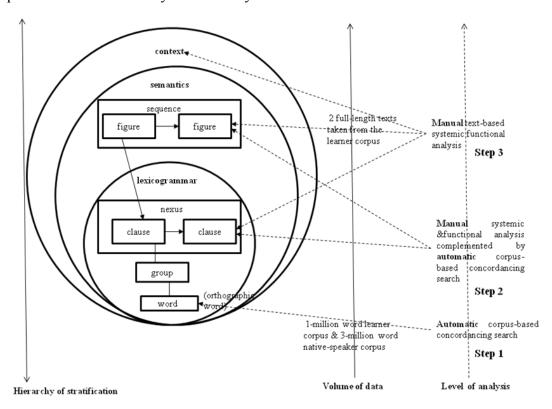


Figure 3.1 Combined method of corpus-based and text-based analysis

As illustrated by Figure 3.1 above, the 'hierarchy of stratification' depicted on the left side of the diagram serves the basis of 'level of analysis' on the right. Starting from the rank of word within the stratum of lexicogrammar, the investigation moves up the hierarchy of stratification from clause and clause complex within lexicogrammar to the stratum of semantics and context. The level of analysis ascends as we move from step1 to step 3, a process accompanied by increased reliance on manual analysis. Strictly speaking, corpus-based analysis can only be automated at the stratum of graphology. (cf. Matthiessen, 2006). As indicated by Matthiessen (2006), it is difficult to use automated techniques to retrieve information about grammar, unless the corpus

has been tagged for word classes (POS, "parts of speech") or even parsed — or unless we have tools available for undertaking such analysis on an unannotated corpus. The challenge of automated analysis is obviously considerable greater with a learner corpus. Full-fledged systemic functional analysis of clauses and semantic analysis is currently beyond the reach of automatic analysis (Halliday & Matthiessen, 2004). In contrast to the upward movement of level of analysis from step 1 to step3, the volume of data depicted by the line in the middle of the diagram undergoes a decrease from step 1 to step 3. As mentioned, the high-level text-based analysis can be deployed to complement the corpus-based methodology, but the volume of data that can be processed at high level is considerably smaller.

Despite the differences with respect to volume of data and level of analysis, it is important to note that the three steps depicted in the diagram do not stand in isolation but form a unified whole of the present investigation of adversative and concessive conjunctions. The interconnections between the steps comprising the combined methodology are indicated by the overlapping areas in Figure 3.1. Step 1, positioned at the bottom of the level of analysis, represents the starting point of the investigation. Being arguably less valuable as compared with analysis done at the next two steps, it forms an indispensible part of the study. Step 3, positioned at the top, represents textbased analysis of adversative and concessive conjunctions. It aims to illustrate the use of these conjunctions at text level, but the analysis is dependent on features of lexicogrammar, which are deployed to realize semantic relations. As highlighted by Halliday (1992), local grammatical selections accumulate to create logogenetic patterns that become part of the systemic history of an unfolding text. In this sense, step 3 overlaps with step 2, as illustrated by three dotted lines pointing to 'clause', 'figure' within the stratum of lexicogrammar and semantics and 'context'. Step 2, positioned in the middle, constitutes an intermediate step between corpus-based study of step 1 and discourse analysis of step 3. Indeed, the vast majority of the thesis is devoted to the analysis of conjunctions to illustrate the lexicogrammatical patterns with reference to semantics, which corresponds to Step 2. As indicated, Step 2 still depends on the concordancing search of individual conjunctions, but the basic unit of analysis is clause in which the conjunction in question occurs. Following Halliday and Matthiessen (2004), who regard clause as the central processing unit in the lexicogrammar, the present study takes clause as the basic unit of analysis to examine the systemic choices of clause complexing and CONJUNCTION, i.e. how a clause is expanded into a clause nexus (2 clauses) or a cohesive sequence. As emphasized by Halliday and Matthiessen (2004, p. 10), "it is in the clause that meanings of different kinds are mapped into an integrated grammatical structure".

To sum up, the investigation of adversative and concessive conjunctions in this study combines corpus-based methodology with text-based discourse analysis to give a full picture of these conjunctions at various levels including the level of word, clause, semantics and context. It is the concern with system and systemic potential that motivates the deployment of a combined method.

# Chapter 4 An Overview of Adversative and Concessive Conjunctions in CLEC and BAWE-E

This chapter provides a general overview of a group of seventeen conjunctions in the semantic categories of contrast and concession in CLEC and the comparable nativespeaker corpus, BAWE-E. As indicated in Chapters 2 and 3, the present study draws on Halliday and Matthiessen's (2004) system of logico-semantic relations, which distinguishes between three subtypes of relations relevant to contrast and concession: adversative, replacive and concessive. Consequently, where 'contrast' is used in the subsequent text, it will be used in the sense of 'adversative' following Halliday and Matthiessen (2004), not in its broad sense to include both adversative and concession. This chapter aims to uncover the similarities and differences in the use of these three types of conjunctions across the two corpora. Comparisons are made in three major aspects of the conjunctions under investigation: 1) overall frequency and distribution of the types of inter-dependency between clauses; 2) distribution of semantic categories and 3) positional distributions. With the exception of overall frequency and distribution of the types of inter-dependency, the discussion of which is mainly concerned with the quantitative aspects of adversative and concessive conjunctions, most of the discussion in this chapter integrates a consideration of frequency data with examples from the corpora.

#### 4.1 Overall frequency and distributions of inter-dependency types

The overall frequency and distribution of a pre-defined list of conjunctions encoding adversative, replacive and concessive relations in CLEC and BAWE-E are set out in Table 4.1 (below on page 82). Note that given the different sizes of the corpora, the frequency of each conjunction is normalized to represent its occurrences per million

words so that direct comparisons can be made.

As mentioned in Chapter 3, the list of conjunctions to be investigated is developed from the SFL-based classifications of clause complexing and CONJCUNCTION (Halliday & Matthiessen, 2004; Halliday & Hasan, 1976). Using WordSmith Tools 5.0 (Scott, 2008), the frequency is obtained from the concordance output of each conjunction under investigation. With the exception of but, the frequency of which includes non-conjunctive uses, the frequency of the conjunctions listed in the table are mostly conjunctives, including three types of interdependency between clauses, namely, hypotactic, paratactic and cohesive. Non-conjunctive uses of expressions belonging to multiple grammatical categories (e.g. yet, still, instead, rather and conversely) are eliminated manually. Non-conjunctive uses refer to uses other than as conjunctions or conjunctive Adjuncts, such as adverbs. However, in light of the difficulty in distinguishing the adversative/concessive sense from temporal meanings by concordancing search, no effort is made at this stage to eliminate temporal occurrences of conjunctions with inherent temporal meaning (e.g. while, at the same time). The distinctions between adversative, concessive and temporal relations encoded by while will be explored in Chapter 6.

Table 4.1 Overall frequency and distribution of adversative/replacive/concessive conjunctions

Inter-dependency	Conjunctive	CLEC	BAWE-E
		N/million	N/million
hypotactic	although	270.7	720
	though	500.9	364.2
	while	539.8	582.1
	whereas	14.1	174
	TOTAL HYPOTACTIC	1325.6	1840.3
paratactic	but	5155.8	2584.6
	yet*	19.9	147.5
	TOTAL PARATACTIC	5175.7	2732.2
cohesive	however	571.3	1937.4
	yet	45.5	149.7
	nevertheless	24	113
	still	11.6	21.2
	at the same time	119.2	31.8
	conversely	1.7	31.8
	in comparison	0	5.3
	in contrast	2.5	37.7
	on the other hand	280.7	146.6
	instead	16.6	26.8
	rather	0	11.5
	on the contrary	112.6	24
	TOTAL COHESIVE	1185.7	2536.7
	TOTAL	7687	7109.2
	% HYPOTACTIC	17.20%	25.90%
	% PARATACTIC	67.30%	38.40%
	% COHESIVE	15.40%	35.70%

As indicated by the percentage of each type of the inter-dependency relations relative to the overall frequency in Table 4.1, both corpora favor paratactic to hypotactic and cohesive. This trend is more pronounced in CLEC (67.3%) than BAWE-E (38.4%) which reveals a more balanced distribution of hypotactic, paratactic and cohesive

conjunctions.

While both corpora favor paratactic conjunctions, Chinese EFL learners seem to make more frequent use of paratactic conjunctions than their native-speaker counterparts (5175.7 vs. 2732.2). The preference for paratactic conjunctions in both corpora is attributed to the high frequency of but, though to a different extent. but in CLEC (5515.8) is twice more common than in BAWE-E (2584.6). In fact, being the most frequent conjunction in both corpora, but accounts for 72% and 36% of the overall frequency of 17 conjunctions covering three types of interdependency in CLEC and BAWE-E, respectively. The high frequency of but in both corpora, however, seems to differ from Biber et al. (1999): while but is frequent in spoken genre, in academic prose, it is less frequent than other paratactic (coordinating) conjunctions. They further argue that the relatively lower frequency of but may be due in part to the fact that contrast is more often expressed by other means in academic writing such as although, however, nevertheless, and on the other hand, which are more frequent in academic prose than in the other registers (p. 82). The higher frequency of but across both corpora as compared with Biber et al. may be indicative of a more colloquial style preferred by EFL and native-speaker learner writers. On the other hand, in contrast to the higher frequency of but in CLEC, the other paratactic conjunction yet is far less common in CLEC (19.9) than in BAWE-E (147.5). Note that yet can also be used as a cohesive conjunction in sentence-initial position. The frequency of each category is mutually exclusive. However, if a similar distinction is made between the paratactic and cohesive use of but, the relative percentage of paratactic and cohesive conjunctions in the two corpora would be reversed. This is attributed to the high frequency of cohesive but, namely, but in sentence-initial position in CLEC (2607.3), which is about ten times more frequent than in BAWE-E (255.3) (see Table 4.6 in Section 4.4). Consequently, the frequency of cohesive conjunctions in CLEC would be higher than that in BAWE-E, whereas paratactic conjunctions are less common in CLEC than BAWE-E. This variation can be illustrated by comparing Figures 4.1a and

#### 4.1b below.

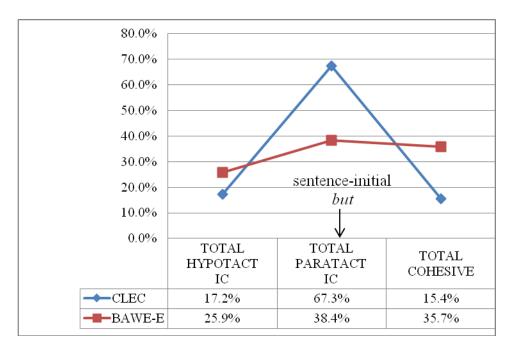


Figure 4.1a Proportional distributions of interdependency types across the corpora

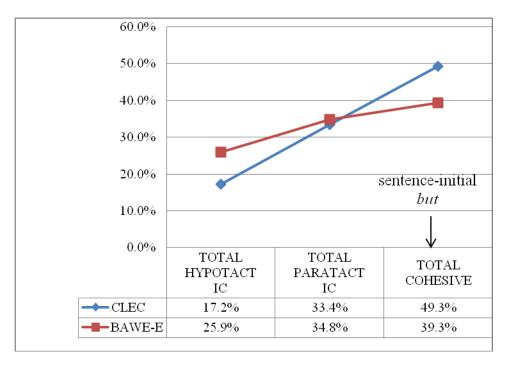


Figure 4.1b Proportional distributions of interdependency types across the corpora

As shown in Figures 4.1a and 4.1b, the alternative choice of including sentence-initial *but* in the category of paratactic and cohesive gives rise to two different distributional patterns of inter-dependency relations across the two corpora. While the distribution

patterns depicted in Figure 4.1a show a striking contrast between the two corpora, a more consistent pattern can be observed in Figure 4.1b: an upward trend can be generally observed as we move from hypotactic to paratactic to cohesive conjunctions in both corpora. This trend is unsurprisingly attributable to many factors, including the different number of conjunctions in each category and the inclusion of two members of high-frequency conjunctions, i.e. *but* and *however* in the cohesive category. Another interesting observation can be made here: in either case, the distribution of paratactic, hypotactic and cohesive conjunctions is more balanced in BAWE-E than CLEC, although the inclusion of sentence-initial *but* in the cohesive category would readjust the balance slightly in favor of cohesive conjunctions in BAWE-E. Admittedly, the quantitative generalization made about native-speaker's deployment of three types of inter-dependency is constrained to adversative, replacive and concessive relations. It seems to support the argument made in Halliday and Matthiessen (2004) about the complementarities between clause complexing and CONJUNCTION in the grammatical realization of rhetorical relations.

However, since *but* is more commonly classified as a paratactic (coordinating) conjunction, the discussion below will focus on the first interpretation, i.e. Figure 4.1a. The cohesive use of *but* will be discussed in Section 4.4 on the positional distributions of conjunctions.

As shown in Table 4.1, unlike paratactic conjunctions, both hypotactic and cohesive types are less frequent in CLEC than BAWE-E. This difference is more prominent in the case of cohesive conjunctions (15.4% in CLEC vs. 35.7% in BAWE-E) than hypotactic conjunctions (17.2% in CLEC vs. 25.9% in BAWE-E).

The distribution of cohesive conjunctions in terms of occurrences per million words across two corpora is visualized in Figure 4.2 below.

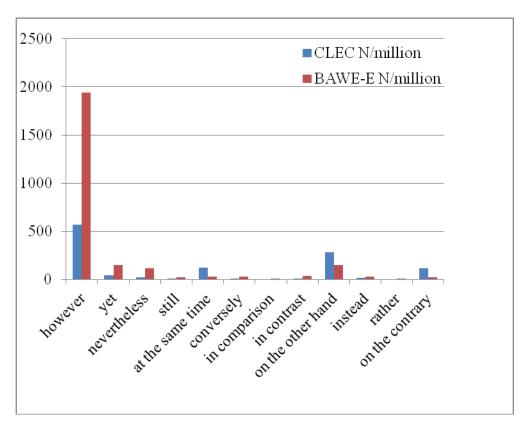


Figure 4.2 The distribution of cohesive conjunctions in CLEC and BAWE-E

As shown in Figure 4.2 above, the higher frequency of cohesive conjunctions in BAWE-E is largely attributed to the predominant use of *however* in BAWE-E (1937.4), which is over three times more than that in CLEC (571.3). In fact, being the most frequent cohesive conjunction in both corpora, *however* accounts for 76% and 48% of the overall frequency of the list of cohesive conjunctions in BAWE-E and CLEC, respectively. The higher frequency of cohesive conjunctions in BAWE-E relative to CLEC is also seen in other cohesive conjunctions, particularly *yet* and *nevertheless*. *Nevertheless* is about four times more frequent in BAWE-E (113) than in CLEC (24). The cohesive *yet* is about three times more common in BAWE-E (149.7) than in CLEC (45.5). As mentioned above, a similar trend is also true of paratactic *yet*, although the trend is more prominent in the paratactic *yet*, which is over seven times more frequent in BAWE-E than in CLEC (147.5 vs. 19.9). Therefore, overall, *yet* in BAWE-E (297.2) is about four times more common than in CLEC (65.4). In addition, the other cohesive conjunctives including *still*, *conversely*, *in comparison*, *in contrast*, *instead* and *rather* are also more common in BAWE-E than

CLEC, although to a much less extent. In contrast to the lower frequency of these conjunctives in CLEC, three conjunctives including *on the other hand*, *at the same time*, *on the contrary* are more common in CLEC than in BAWE-E.

On the other hand, the overall frequency of hypotactic conjunctions shows less variation across the two corpora as compared with paratactic and cohesive conjunctions. However, in terms of individual conjunctions, there are still some notable differences between the two corpora. The distribution of hypotactic conjunctions across two corpora is visualized in Figure 4.3 below.

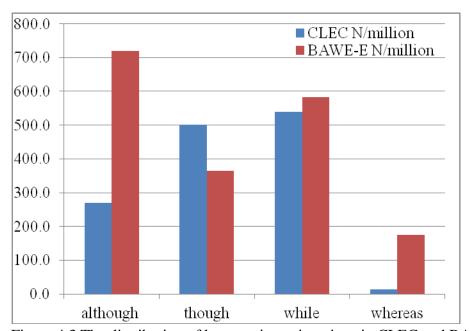


Figure 4.3 The distribution of hypotactic conjunctions in CLEC and BAWE-E

As shown in Figure 4.3 above, with the exception of *though*, all hypotactic conjunctions are more common in BAWE-E than in CLEC. The most striking difference concerns the use of *whereas*, which is about 12 times more frequent in BAWE-E than in CLEC (174.0 vs.14.1). The low frequency of *whereas* in CLEC may be attributed to the deployment of *while*, which is more or less evenly distributed in the two corpora (539.8 vs. 582.1). Moreover, *while* also represents the most frequent hypotactic conjunction in CLEC, which is a sharp contrast to the low frequency of the other three hypotactic conjunctions. For this reason, and also for its multivalent status

to encode different relations, while is selected for detailed study in Chapter 6. although, being the most frequent hypotactic conjunction in BAWE-E (720.0), is 2.7 times more frequent than in CLEC (270.7). The preference of although over while and whereas in BAWE-E seems to indicate that although can be more generally deployed to encode concession. As pointed out by Quirk et al. (1985, p. 1098f), "although and the more informal though are the most versatile of concessive subordinators (including although, though, while, whilst, whereas), since they may in fact relate clause in which the situation are similar". In contrast, whereas is "the most restricted of these subordinators, requiring antithesis between two situations." (p. 1098f).

#### 4.2 Distribution of semantic categories

Having discussed the frequency and distribution of the inter-dependency types of the list of conjunctions across the two corpora, I will now turn to the distribution of the semantic categories of these conjunctions. As indicated, given the overlap between adversative and concessive relations associated with multivalent conjunctions, it is difficult to obtain exact calculations of the frequency of each semantic category based on concordancing search. Therefore, as a compromise, I decide to include two additional categories of multivalent conjunctions. Based on their multivalent status, multivalent conjunctions are classified into multivalent adversative/concessive and multivalent adversative/concessive/ temporal. In this way, the probability profile of the conjunctions under investigation to encode different types of expansion can be outlined. See Table 4.2 below for the semantic classification of the list of conjunctions and Figure 4.4 for the probability for these conjunctions to realize adversative, replacive, concessive and multivalent relations across two corpora.

Table 4.2 Classification of adversative, replacive, concessive and multivalent conjunctions

monovalent adversative	conversely, in comparison, in contrast, on	
	the other hand	
monovalent replacive	instead, rather, on the contrary	
monovalent concessive	although, though, nevertheless, still	
multivalent adversative/concessive	but, yet, however	
multivalent	while, whereas, at the same time	
adversative/concessive/temporal		

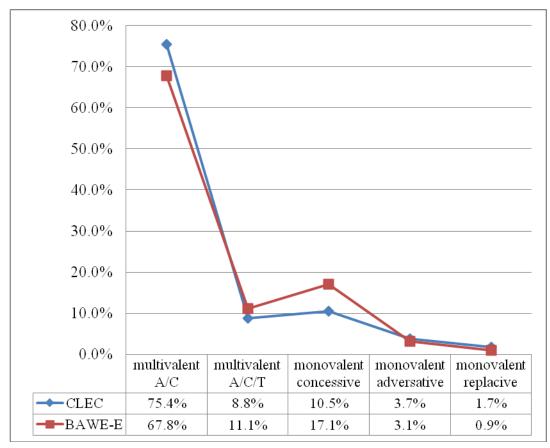


Figure 4.4 The probability for conjunctions to realize the adversative, replacive, concessive and multivalent semantic relations across two corpora

As shown in Figure 4.4, multivalent A/C (adversative/concessive) conjunctions are far more frequent than the total of the other four types of conjunctions. The high frequency of multivalent A/C conjunctions is hardly surprising, owing to the inclusion of two high-frequency conjunctions, namely *but* and *however* in the category. The low frequency of both mono-adversative and mono-concessive conjunctions can be

explained by the fact that adversative and concessive relations are more often marked by high-frequency conjunctions of multivalent status. However, it is interesting and surprising to find that mono-replacive conjunctions are least frequent in both corpora. As mentioned, replacive relation differs in an important way from adversative relation in that it signals not only a contrast but also or replacement. The sentence or clause immediately before the conjunctive encoding replacive relation is thus typically associated with negative polarity (Halliday & Matthiessen, 2004). For this reason, membership of replacive relation is more fixed than that of adversative and concessive relations. Therefore, since the multivalent status of the multivalent conjunctions is not associated with replacive relation (the replacive use of but is an exception, which will be explored in Chapter 5), it is very likely that replacive relation is encoded by other means, for instance, by preposition groups such as *instead of* +NP, rather than+ NP which function to argue a clause internally rather than to expand a clause externally by relations of expansion (Halliday & Matthiessen, 2004). These resources will be explored in Section 4.3 to provide a complementary of view of clause complexing and CONJUNCTION. Indeed, the complementary contributions to relations of expansion of clause complexing, conjunction and circumstantial augmentation will play a fairly important role in subsequent discussion.

Admittedly, Figure 4.4 only provides a general picture of the probability of conjunctions to realize different types of expansion. However, as indicated, given the difficulty of quantifying the types of relations encoded by the list of conjunctions by automatic analysis, the classification is proposed to serve as a starting point for more in-depth meaning-oriented investigation. Indeed, it is the high frequency of these multivalent conjunctions such as *but*, *however* and *while* that makes them interesting targets for detailed study. As highlighted by Biber et al. (2004), frequency data is not explanatory. Frequency data identifies patterns that must be explained. They further note that the usefulness of frequency data (and corpus analysis generally) is that it identifies patterns of use that otherwise often go unnoticed by researchers.

# 4.3 A complementary view: circumstantial augmentation vs. clause complexing and conjunction

As mentioned, circumstantial elements function as metafunctional agnates of semantic relations realized by clause complexing and CONJUNCTION (Halliday & Matthiessen, 2004). Frequencies of a group of six prepositional phrases functioning as circumstantial Adjuncts are identified to complement the quantitative overview of clause complexing and CONJUNCTION discussed in the previous section.

Table 4.3 Distributions of circumstantial elements of comparison/replacement /concession

Circu	mstantial elements	CLEC	BAWE-E
Circumstantial elements		N/million	N/million
comparison (adversative)	in contrast to/with	8.3	56
	in comparison to/with	3.3	34.9
replacement	instead of	97.7	48.2
	rather than	54.6	356.7
concession	despite	37.3	308.2
in spite of		37.3	25.5
TOTAL		238.5	829.6

As shown in Table 4.3, overall, circumstantial Adjuncts are much more common in BAWE-E than CLEC. This trend is particularly notable in the use of *rather than* and *despite*. The former is six times more frequent, whereas the latter is eight times more frequent in BAWE-E than CLEC. Examples will be given later in this section.

On the other hand, if a comparison is made between circumstantial Adjuncts and conjunctions of the three types of inter-dependency relations (see Figure 4.1a), it can be seen that circumstantial elements are least frequent in both corpora. Figure 4.5 presents the proportional distributions of the four types of realizations.

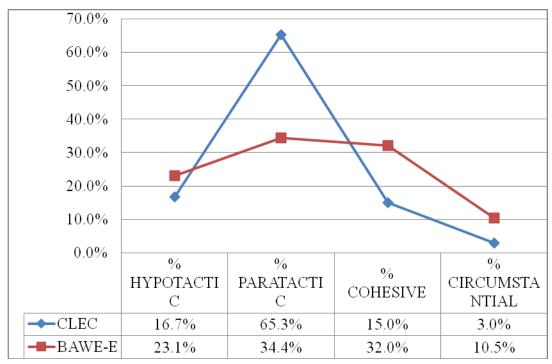


Figure 4.5 Proportional distributions of structural, cohesive and circumstantial realizations

In terms of semantic relations, circumstantial elements construe relations on a similar system of relations of expansion as clause complexing and CONJUNCTION (see Halliday & Matthiessen 2004, p. 598 for the synoptic summary of expansion covering textual, logical and experiential metafunctions). Patterns of agnation generally hold between conjunctions and circumstantial elements with respect to replacive and concessive relations. However, there seems to be a lack of correspondence with respect to adversative relations. As mentioned in Chapter 3, according to Halliday and Matthiessen's (2004) classification of circumstantial elements, *in comparison to/with* and *in contrast to/with* do not belong to the adversative type of extension. Instead, they are regarded as the 'manner' subtype of enhancing in the sense of 'like' or 'unlike' (ibid, p. 262). However, the relation they encode seems to shade into the adversative subtype of extending as *in contrast* or *in comparison*, as illustrated by examples later in this section. See Figure 4.6 below for the relative percentage of circumstances of comparison (adversative), replacive and concession across two corpora.

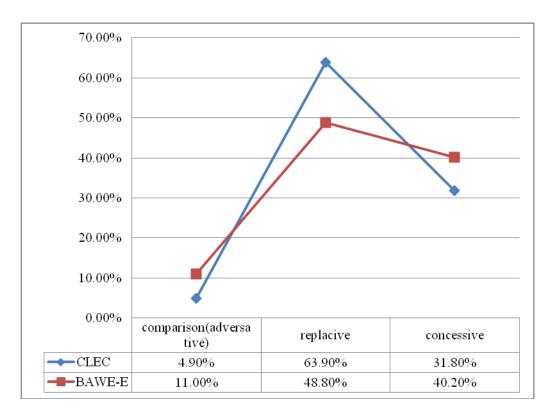


Figure 4.6 Percentage of adversative, replacive and concessive circumstantial elements

As shown in Figure 4.6, replacive type of circumstantiation, which is marked by *instead of* and *rather than* has the highest frequency in both corpora. This is the opposite of the trend of conjunctions. As discussed in the previous section, replacive subtype of extension, which is marked by *instead*, *rather* or *on the contrary* is least frequent compared with the overall frequency of adversative extension and concessive enhancement.

As mentioned, replacive extension indicates a replacement of what is presented in the preceding clause, which is typically associated with negative polarity or reversal of polarity (Halliday & Matthiessen, 2004). However, with the deployment of circumstantial elements, such as *instead of* and *rather than*, replacement is construed within the clause and thus a negative preceding clause is not in operation. A pair of examples illustrating *instead* as a conjunctive Adjunct and *instead of* as a circumstantial Adjunct is given below.

- (1) Its restrictive nature left middle class women <u>little</u> freedom to choose their path in life or have any influence over their own decisions. Instead, they were expected to conform to social ideals of womanhood, in which they should be obedient, meek and, ultimately, subordinate to the male figures in their lives. (BAWE-E)
- (2) Instead of the typical, traditional woman, the playwright can present his audience with a much stronger woman. (BAWE-E)

As shown above, while the conjunctive Adjunct *instead* in (1) requires a preceding negation, which is marked by *little*, to indicate the replacement, *instead of* in (2) allows the sense of replacement to be construed within the domain of clause without referring to explicit negation. Specifically, the nominal group within the prepositional group, *the typical, traditional woman* is replaced by *a much stronger woman*, which functions as Goal of the material process *present*. As indicated by Halliday and Matthiessen (2004), prepositional phrases represent a metaphorical realization of a clause through nominalization, which is a kind of 'minor process subsidiary to the main one' construed by the verb in the clause (p. 263). It is equally possible for the replacive relation to be construed congruently as a cohesive sequence, where the circumstantial Adjunct is expanded into a clause, as illustrated by (2a) below.

(2a) The playwright does not present his audience with the typical, traditional woman. Instead, he presents his audience with a much stronger woman.

Here, while the replacive relation is realized as a cohesive sequence marked by clause-initial *instead*, the negative polarity has to be reinstated. However, the alternative cohesive sequence seems to be repetitive compared with the circumstantial augmentation in (2). The reason, as indicated above, is that the sense of replacement is associated with the nominal group rather than the entire clause, which can be more effectively expressed by a prepositional phrase functioning as a circumstantial Adjunct in the clause.

The preference for circumstantial augmentation is even more prominent with respect to *rather than*. An example is given in below.

(3) Rather than physical work, service based employers particularly are increasing relying on employees' knowledge. (BAWE-E)

Similarly, the prepositional group *rather than physical work* in (3) functions as a circumstantial element of the clause, giving a sense of replacement. That is, the nominal group *physical work* is replaced by *employees' knowledge*, which functions as one of the participants of the major process *relying on*, the other participant being *service based employers*. On the other hand, if *physical work* is to be construed as a participant in the clause rather than an element of the circumstantial Adjunct, then the domain of replacement has to be expanded into a cohesive sequence consisting of two ranking clauses:

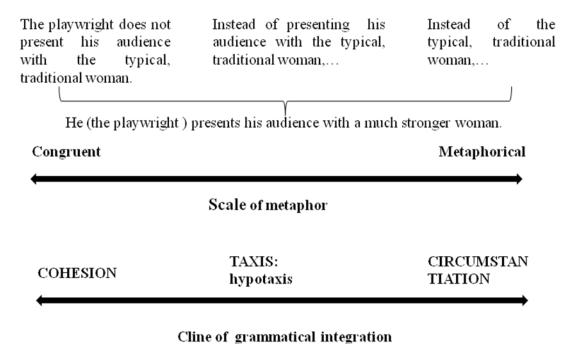
(3a) Service based employers no longer rely on physical work. Rather, they are increasing relying on employees' knowledge.

As indicated above, the choice between the two patterns may relate to many factors, but it seems that with respect to replacive relation, circumstantial augmentation is generally favored over cohesive sequences, as indicated by the higher frequency of the replacive type of circumstance (Figure 4.6) relative to the extremely low frequency of replacive conjunctives (Figure 4.1 in Section 4.2).

Note that *instead of* and *rather than* can also function conjunctively, introducing non-finite hypotactic clauses. The hypotactic agnate structures associated with examples (2) and (3) are given below.

- (2b) Instead of presenting his audience with the typical, traditional woman, the playwright presents his audience with a much stronger woman.
- (3b) Rather than relying on physical work, service based employers are increasing relying on employees' knowledge.

Here, both *instead of +ing-*clause in (2b) and *rather than +ing-*clause (3b) differ from *instead of +NP* and *rather than +NP* as circumstantial Adjuncts discussed above. While circumstantiation represents minor process, the hypotactic clause represents a full process relative to another process realized by the main clause. Consequently, the hypotactic clauses introduced by *instead of* or *rather than* no longer represent metaphorical realization of the replacive relation as compared with their circumstantial counterparts, namely, *instead of +NP*, *rather than + NP*. Rather, they are more like the congruent form realized by cohesive sequences. In the sense of Halliday and Matthiessen (1999), these patterns can be placed along a scale of metaphor, which interacts with grammatical integration. Take (2) as an example, patterns of agnation between cohesive sequence, taxis and circumstantial augmentation along the scale of metaphor and cline of integration are summarized in Figure 4.7 below.



96

Figure 4.7 Analysis of example (2) along the scale of metaphor and cline of grammatical integration

Figure 4.7 is a reflection of two important properties of metaphorical realization noted by Halliday and Matthiessen (1999). One is a downward shift on the grammatical rank scale: from clause complex to clause and/or from clause to nominal group. The other is that this downward shift is associated with loss of information (ibid). As shown in Figure 4.7 and as discussed earlier in this section, if a replacive relation is realized as a cohesive sequence involving conjunctive Adjunct *instead*, the preceding clause acquires a full-fledged process associated with negative polarity. In contrast, circumstantial augmentation is not given clause status and hence less explicit. Note that the interaction between the scale of metaphor and cline of integration applies to all types of semantic relations.

Similarly, patterns of agnation between internal augmentation of concession by circumstantial elements and external augmentation by clause complexing and conjunction can be observed in examples given below.

- (4) Despite the fact that these tests were abolished in 1965, the legacy of disenfranchisement is one which can be difficult to abolish. (BAWE-E)
- (4a) Although these texts were abolished in 1965, the legacy of disenfranchisement is one which can be difficult to abolish.
- (4b) These texts were abolished in 1965. Nevertheless, the legacy of disenfranchisement is one which can be difficult to abolish.

Here, the prepositional group *despite the fact that these tests were abolished in 1965* in (4), which serves as a circumstantial Adjunct of the clause is expanded into a hypotactic *although*-clause in (4a), which involves full-fledged process. This is accompanied by the de-metaphoricalization or de-nominalization (Halliday & Matthiessen, 2004) of the rank shifted embedded clause introduced by *that*, i.e. *these* 

tests were abolished in 1965, which functions as nominal group of the prepositional phrase in (4). The conjunctive Adjunct nevertheless illustrated by (4b) represents a further upward shift from hypotactic nexus, as in (4), to the cohesive sequence.

Finally, as illustrated in Figure 4.7 above, circumstances of comparison (adversative) are the least frequent as compared with circumstances of concession and replacive types in both corpora. In addition, as mentioned in the previous section, with the exception of *on the other hand*, mono-adversative conjunctives including *in comparison*, *in contrast* are rarely used in CLEC. The reason could be that *in contrast* and *in comparison* as well as their circumstantial counterparts *in contrast to/ with* and *in comparison to/ with* are more specific with respect to the type of contrast they encode. That is, they require a specification of the contrast with the preceding text along specific contrasted areas. As a general principle and as indicated by the frequency analysis in Section 4.2, multivalent conjunctions tend to be more frequent than monovalent conjunctions.

An example of *in compassion with* from CLEC is presented below.

(5) Furthermore this, they also exchange students and teachers with its counterparts abroad and often bolds discussions even debates among students, [sn9,-] [fm3,-] by this means, students are supposed to develop comprehensively. In comparison with it, the hometown school still concentrates on the traditional teaching method--- teacher-centrism, [sn9,-] [fm3,-] among those classes at different [np6,5-3] grade, you can find their curricula are fully arranged (CLEC).

Apart from a number of error-tags indicating the ungrammaticality of example (5), the pronoun *it*, which functions as Complement in the prepositional phrase, namely *in* comparison with *it*, seems to be ambiguous as to whether it refers to they in the preceding sentence or the fact that they also exchange students and teachers with its counterparts abroad and often bolds discussions even debates among students, [sn9,-]

[fm3,-] by this means, students are supposed to develop comprehensively. The context seems to suggest the latter, which refers to a large text span consisting of four successive clauses rather than an element such as a pronoun or nominal group. In this case, a conjunctive Adjunct such as in comparison, in contrast or on the other hand can be more effectively deployed to indicate the contrast.

Native-speaker writers, on the other hand, make frequent use of reference pronouns such as *this* or *that* within the prepositional phrases that function as circumstantial elements, such as *despite this*, *in spite of this*, *in contrast to this*. In comparison, *that* is less frequently used within the prepositional groups, whereas *it* is not used at all. These pronouns including *this*, *that* and *it* embody a sense of 'extended text reference' (Halliday & Matthiessen, 2004).

An instance of *in contrast to this* from BAWE-E is given below:

(6) In this sense, it can be generally accepted that the relatively superior country in economic capability which is able to coerce its trading partners into accepting its request has little preference for a formal institution of economic co-operation than more vulnerable partners. In contrast to this, the relatively weaker country is more likely to have preference to institution of economic co-operation. (BAWE-E)

Here, the text reference item *this* functions to summarize the preceding text so that it can be construed as a Complement of the prepositional phrase. The result of this is that the contrast or comparison is argued clause-internally.

## 4.4 Syntactic distribution

This section provides a positional probability profile of the list of conjunctions across the two corpora. Following the distinction between clause complexing and CONJUNCTION as two complementary resources for realizing relations of expansion, the positional distribution of structural conjunctions and conjunctive Adjuncts will be discussed in two separate sections, namely 4.4.1 and 4.4.2, respectively.

## 4.4.1 Syntactic distribution of structural conjunctions

Strictly speaking, structural conjunctions do not exhibit any variation in the syntactic positions they can occupy in a clause. Instead, they are fixed at the initial position of the clause. As pointed out by Halliday and Matthiessen (2004), structural conjunctions are inherently thematic. That is, whenever they occur, they are found in the initial position. They further argue that the inherently thematic status of conjunctions allow them to locate the clause in a specific logico-semantic relationship to another clause in the neighborhood. Their thematic status comes as part of a package, along with their particular discursive force (p. 83).

However, despite the syntactic restriction on the position of structural conjunctions, there is one type of variation closely related to the position of conjunctions that is equally significant for interpreting their discourse functions. This has to do with the systemic potential for hypotactic clauses introduced by hypotactic conjunctions to be placed either before or after the associated main clause. Final hypotactic clauses are associated with hypotactic clauses nexuses with 'progressive sequence' ( $\alpha \wedge \beta$ ), whereas initial hypotactic clauses are associated with 'regressive sequence' ( $\beta \wedge \alpha$ ) (Halliday & Matthiessen, 2004). The systemic differences between the two alternative sequences will be explored in more detail in Chapter 6, which is a detailed study of the hypotactic conjunction *while*. Note that the sequence of clauses in a paratactic nexus is typically fixed (1 ^ 2), which means that there is no choice involved in determining the sequence. Instances of initial and final hypotactic clauses are found in both CLEC and BAWE-E. Examples illustrating final and initial *although*-clause from BAWE-E and CLEC are given below.

(7) The muscularity of Neanderthals are commonly interpreted as reflecting a

demanding physical lifestyle in cold environment for hunting abilities, <u>although</u> the enlargement of muscle has the risk of reaching the limit to energy reserves. (BAWE-E) (8) There is no law on euthanasia in present China, <u>although</u> it has been quietly practiced on several cases in some urban areas. (CLEC)

(9) <u>Although</u> differences in opinion have arisen over these conclusions, the recent discovery of simple bone tools such as digging sticks at a related site at Swarkrans by Backwell and D'Errico (2001) could further substantiate Susman's theory. (BAWE-E) (10) <u>Although</u> he was considered an idiot and a heretic, he just turned a deaf ear to such "criticism and dedicated himself to the pursuit of truth. (CLEC)

As shown above, both (7) and (8) illustrate a progressive sequence ( $\alpha \wedge \beta$ ) which corresponds to the iconicity of the sequence of events construed by the initial main clause and the subsequent dependent clause. The progressive sequence combined with concession gives rise to the sequence of consequence  $\wedge$  concession ( $\alpha \wedge \beta$ ). In contrast, the sequence of events in examples (9) and (10) is reversed, hence follows the sequence of concession  $\wedge$  consequence ( $\beta \wedge \alpha$ ), with the main clause preceding the dependent clause.

Given the systemic potential for hypotactic nexuses to encode either progressive or regressive sequence, the question then arises as to the distribution of the two sequences associated with a group of hypotactic conjunctions including although, though, while and whereas across the two corpora. In light of the constraint of corpusbased research, which in the strict sense can only be processed at the stratum of orthographic words (Matthiessen, 2006), orthographic patterns associated with progressive and regressive sequences are applied for concordancing search. That is, sentence-initial hypotactic conjunctions characterized by initial capitals are used to search for the regressive sequence, i.e. Although/Though/While/Whereas Y, X, whereas non sentence-initial hypotactic conjunctions characterized by initial lower for the progressive used to search sequence, i.e. X, case are

although/while/whereas Y (X and Y refer to two clauses in a hypotactic clause nexus). The search results do not show one-to-one correspondence between syntactic positions of hypotactic conjunctions and positioning of hypotactic clauses, which is not surprising. I will come back to this point later. The distribution of sentence-initial and non sentence-initial hypotactic conjunctions in CLEC and BAWE-E is presented in Table 4.4 below.

Table 4.4 Distribution of sentence-initial and non sentence-initial hypotactic conjunctions in CLEC and BAWE-E (N/million)

	C	CLEC	BAWE-E		
	Sent-initial Non-sent-initi		Sent-initial	Non-sent-initial	
although	187.1	83.6	358.3	361.7	
though	264.1	237.6	88.1	276.1	
while	131.6	408.2	201.7	380.4	
whereas	5.0	9.1	29.3	144.7	
TOTAL	587.9	738.6	677.4	1163.0	

As shown in Table 4.4, overall, non sentence-initial position is more frequent than sentence-initial position in both corpora. The preference for non sentence-initial position over sentence-initial position is more pronounced in BAWE-E (1163.0 vs. 677.4) than CLEC (738.6 vs. 587.9). It worth pointing out that the higher frequency of non sentence-initial *though* in BAWE-E is attributed to the use of *even though* (95.3) and *as though* (18.7), accounting for over 40% of the non sentence-initial *though*. In contrast, in CLEC, *even though* (32.3) and *as though* (2.5) only covers about 15% of the non sentence-initial *though*. What is unique about both *even though* and *as though* is that they do not represent co-occurrence patterns of *though* but instead function as a single unit like *though*, introducing either initial or final hypotactic clauses. However, due to their close relation to *though*, they are included in the overall frequency and distribution of syntactic positions.

The figures in Table 4.4 seem to indicate that overall, progressive sequence ( $\alpha \wedge \beta$ ) in the form of X, although/while/whereas Y is a more favored pattern across the

two corpora. Similarly, Biber et al. (1999, p. 848) also indicate that concessive adverbial clauses bound by hypotactic (subordinating) conjunctions predominantly follow the associated main clause.

However, a closer examination of the concordance output of non sentence-initial hypotactic conjunctions reveals that this is far from the truth. In non sentence-initial position, a hypotactic conjunction is typically preceded by the associated main clause and thus giving a progressive sequence ( $\alpha \land \beta$ ), but it is also possible for it to be preceded by a non-clausal element. Using the 'patterns' function of *WordSmith Tools* 5.0, it is found that there are some common patterns associated with non sentence-initial hypotactic conjunctions in 'L1' (first left) position. The top five patterns associated with each non sentence-initial hypotactic conjunction in BAWE-E are summarized in Table 4.5 below, which is ranged in order of the frequency of the patterns. While commonly found in BAWE-E, these patterns seem to be absent in CLEC, which indicates that the syntactic distributions of hypotactic conjunctions in CLEC (see Table 4.5) can be seen as a reflection of the distribution of regressive and progressive patterns of hypotactic clauses.

Table 4.5 Top five recurrent patterns of non sentence-initial hypotactic conjunctions in BAWE-E

alth	ough	tho	though while whereas		while		reas
L1	N	L1	N	L1	N	L1	N
<u>that</u>	197	<u>that</u>	21	<u>that</u>	97	<u>and</u>	8
<u>and</u>	78	<u>and</u>	19	however	25	<u>that</u>	4
however	48	therefore	12	<u>and</u>	22	_	_
therefore	30	however	6	thus	12	_	_
so	15	_	_	therefore	11	_	_

As shown in Table 4.5, several items are commonly found in L1 position before hypotactic conjunctions. These patterns seem to fall into three categories associated with hypotactic clauses: 1) the hypotactic clause is bracketed in another hypotactic

clause introduced by *that*; 2) the hypotactic clause is linked to a preceding paratactic clause by the paratactic conjunction *and*; 3) the hypotactic clause is preceded by a conjunctive Adjunct encoding contrast/concession or result, such as *however* and *therefore*, etc. At the same time, it is worth noting that the three patterns are not evenly distributed to the four conjunctions. For instance, while the third pattern, namely conjunctive Adjunct +hypotactic conjunction is common with non sentence-initial *although*, *though* and *while*, it is not associated with *whereas*. Moreover, the probability for *whereas* to be preceded by *that* or *and*, corresponding to the first two patterns, seems to be much lower than the other three conjunctions. This is partly due to its lower frequency in comparison with the other three hypotactic conjunctions and partly due to the restrictedness of the concessive sense it encodes, as discussed in Section 4.1 in this chapter.

On the other hand, despite the apparent syntactic differences between these patterns, they have two characteristics in common: they all function as textual Themes (including structural Theme and) and these patterns all represent the regressive sequence  $(\beta \land \alpha)$  (concession  $\land$  consequence), which is textually distinct from the progressive sequence  $(\alpha \land \beta)$ , with hypotactic clause in the final position in a hypotactic clause nexus. Note that Halliday and Matthiessen (2004) interpret the pattern of conjunctive Adjunct + hypotactic clause + main clause as enclosed hypotactic clause  $\alpha \land << \beta >>$ . These two characteristics have two significant implications for interpreting the textual function of hypotactic conjunctions. The first characteristic implies that hypotactic conjunctions are always given thematic status, even if it is preceded by an initial conjunctive Adjunct. The second characteristic indicates that syntactic positions of hypotactic conjunctions at orthographic level cannot serve as reliable criteria for distinguishing between progressive and regressive sequences associated with hypotactic clauses. As highlighted by Matthiessen (2006), when orthographic patterns are used to search for semantic categories, which is referred to as the path crossing the stratal boundary between graphology and

lexicogrammar, the automatic analysis has to be complemented by manual analysis of concordances lines to ensure the reliability of quantitative findings.

While the frequency of hypotactic conjunctions preceded by *that* and *and* can be derived from the concordance output of non sentence-initial hypotactic conjunctions, the possibility of hypotactic conjunctions to be preceded by varieties of conjunctive Adjuncts gives rise to a tremendous amount of manual work and thus making it difficult to arrive at reliable quantitative generalizations about this pattern. For instance, by using the 'sentence position' function of WordSmith Tools 5.0 (Scott, 2008), we can get a sense of the wide range of conjunctive Adjuncts preceding *although*. Figure 4.8 shows the first 30 concordance lines for non sentence-initial *although* sorted by sentence position (decreasing).

```
Concordance
Ν
1
       four years he seems to be proven right. Nevertheless, although the statistical measure of significance - the
2
         that the Bolsheviks had very little support. However, although the number of participants in the coup itself
3
        each other (see also van Waarden 1995b). Secondly, although the strength and the above mentioned
4
          which vast amounts of money are made. Therefore, although CAM can offer an alternative to the medical
5
       extensive obsidian characterisation studies. Similarly, although it can be accepted that the colonisation of
6
            perspective being essentially objective. However, although it is true that Xenophon's Agesilaos
7
       too regular a basis by delusions of social mobility. For although he hopes, as I have already mentioned, one-
8
        have also been set up (Wells, et al., 1998). However, although not all guidelines are being adhered to by
9
         . See R. Scott (2005a), supra, n.18, at 393. Thirdly, although this was not explicitly contended in the
10
       use to increase its agricultural productivity. Secondly, although Eurocentrics have continuously focused on
11
       principles of Mao are a continuing success. However, although as a figurehead Mao is still a very important
12
       be associated with the higher yielding cows. Therefore although there are steps in place to ensure that the
13
        there - in the blending of manner and matter. Indeed, although there is no rhyming scheme whatsoever,
14
        : 21) in 25% of children aged 7;0 with SLI. Therefore, although the exact relationship between non-verbal
15
                feelings rather than hard evidence. Secondly, although Guest et al (2003) study confirm the
16
         mission civillastrice in West Africa. She shows that although the French abolished the slave trade in 1905
17
       to be Emma's favourite pastime: matchmaking. Thus, although a first reading may render us as blind as
18
        a glimpse at Ulrich's (and Musil's) utopian vision. But although Musil's death prevented the publication of
19
            for stories told and arguments presented'. Again, although he was not the first historian to use
20
              to this factor is the case of NestlÃO. NestlÃO, although classified as one of the largest food-
21
       to withdraw troops against the presidents wishes. So, although the constitution can be a source of power
22
           results (Welbourn, 1991; Chambers, 1997). Thus, although in theory there is a large pool of research
23
             argues, 'the people [have] but a single will'. And although Rousseau favours the ballot vote, he argues-
24
          through at the expense of smaller interests. Again, although this link cannot be proven, it seems
25
       the only tools we have to interact with the world. Also, although reason and rationality may provide some
26
         wife" and "I do take thee to my husband". Moreover, although letters were not supposed to use "Sweet"
27
           truth is only my truth takes precedence. However, although Nietzsche did criticize aspects of logic,
28
        inflation you must increase unemployment. However, although adaptive expectations may be useful under
29
       in creating popularity through its attractions. However, although it had the means of enticing vast swathes
30
          its audience by its depiction of human suffering. So although Euripides does seem to have intended to
```

Figure 4.8 Concordance lines for non sentence-initial although from BAWE-E

As shown in Figure 4.8, except for a few concordance lines, which have been crossed out, most of the concordance lines represent the pattern of the initial conjunctive Adjunct + *although*. Expanding each of these concordances shows that this pattern consistently follows regressive sequence ( $\beta \wedge \alpha$ ), as discussed above. An example (Concordance 12) is given below.

(11) Therefore although there are steps in place to ensure that the welfare of higher yielding dairy cows is not compromised, so far I feel that there still many issues that surround the higher yielding dairy cows and as a result the policy of promoting yet

It is interesting to note that in addition to the three patterns discussed above, there is yet another option, as illustrated by Concordance 20. The concordance line is expanded in example (12) below to show the full context of the hypotactic nexus.

(12) Nestléalthough classified as one of the largest food companies in the world, does not only produce food but has in fact diversified its investment in non-core business assets as well, such as in Alcon, a maker of ophthalmological equipment and also L'Oreal, a French cosmetics manufacturer. (BAWE-E)

Here, the elliptical *although*-clause is inserted between the initial subject and the main clause, thereby forming an enclosed structure of  $\alpha << \times \beta >>$ . The medial position *although*-clause illustrated by (12) and is very infrequent. This is because hypotactic clauses, like circumstantial Adjuncts, are peripheral elements of the clause or 'sentence margins' (Longacre, 2007, p. 372) both syntactically and semantically. The peripheral status of hypotactic clauses or circumstances of Adjuncts allows them to be placed either initially as Theme or finally as part of the Rheme of the clause or as Rheme of the clause nexus. In contrast, medial position seems to disturb the natural order of elements in the clause and hence more marked as compared with initial and finial position hypotactic clauses. Therefore, it would have been possible for the writer to opt for an initial *although*-clause or an initial non-finite hypotactic clause without *although*, as illustrated by (12a) and (12b) below.

(12a) Although Nestlé is classified as one of the largest food companies in the world, it does not only produce food but has in fact diversified its investment in non-core business assets as well, such as in Alcon, a maker of ophthalmological equipment and also L'Oreal, a French cosmetics manufacturer.

(12b) Classified as one of the largest food companies in the world, Nestlé does not

only produce food but has in fact diversified its investment in non-core business assets as well, such as in Alcon, a maker of ophthalmological equipment and also L'Oreal, a French cosmetics manufacturer.

To sum up, in this section, I have demonstrated how syntactic positions of hypotactic conjunctions at the orthographic level can be deployed to investigate the alternative sequences of hypotactic clauses relative to the associated main clauses in hypotactic clause nexuses. It is found that while sentence-initial hypotactic conjunctions correspond to regressive sequence ( $\beta \wedge \alpha$ ), there is no one-to-one correspondence between non sentence-initial hypotactic conjunctions and progressive sequence ( $\alpha \wedge \beta$ ). That is, it is equally possible for a non sentence-initial hypotactic conjunction to be preceded by the associated main clause thereby giving a progressive sequence ( $\alpha \wedge \beta$ ) and by other elements or clauses. Among these patterns, three patterns have been identified: 1) that + hypotactic clause; 2) and + hypotactic clause; 3) conjunctive Adjunct + hypotactic clause. These patterns are frequently found in BAWE-E, whereas they seem to be absent in CLEC. These patterns are of particular interest because they are textually distinct from non-sentence initial hypotactic conjunctions preceded by initial main clauses, which represent progressive sequence  $(\alpha \land \beta)$ . Instead, they are arguably variants of the regressive sequence ( $\beta \wedge \alpha$ ) and thus more like hypotactic conjunctions in sentence-initial position. Given the difficulty in arriving at the exact frequency data of these patterns by corpus search, it suffices to say in this section that final position hypotactic clauses, corresponding to progressive sequence, are less dominant than would expected from the syntactic distribution of sentence-initial and non sentence-initial hypotactic conjunctions. More discussion of the textual and semantic differences between initial and final hypotactic clauses will be found in Chapter 6, which is a detailed study of the use of the hypotactic conjunction while by two groups of writers.

## 4.4.2 Syntactic distribution of cohesive conjunctions

A special feature of conjunctive Adjuncts or cohesive conjunctions, compared to structural conjunctions, is that they are not fixed at the initial position in the clause. That is, they may occur initially as textual Theme or non-initially in the Rheme of the clause. As suggested by Halliday and Matthiessen (2004), conjunctive Adjuncts are inherently thematic, which means that they are very frequently found in a thematic position (i.e. before the topical Theme), but they also occur in other locations in the clause.

For purposes of concordancing search, the various positions available to a group of adversative, replacive and concessive conjunctive Adjuncts are classified into two broad categories: clause-initial and non clause-initial. Clause-initial position is used to designate the position before any elements in the clause so that it corresponds to conjunctions with initial capitals. Non clause-initial include both medial and final position. Since final position is infrequent in both corpora and is only associated with *however*, no distinction is made between the two categories in the frequency distribution presented in this section. A non clause-initial conjunctive Adjunct can be preceded by a variety of elements. Examples of non clause-initial *however* are given below.

- (13) <u>Problems</u> **however** tend to arise when there is a dramatic loss in cognitive function which interferes with a person's everyday life and it is this that constitutes as dementia (Seligman, 2001). (BAWE-E)
- (14) <u>After 1994</u>, **however**, 'the flying goose pattern [had] disintegrated, and the countries in East Asia were left to search for other models and definitions of their self-interest'. (BAWE-E)
- (15) <u>Firstly</u>, **however**, a caveat should be attached to the preceding discussion in that it is too simplistic to place each of the authors mentioned above as supporting any distinct interpretation of the labour theory of value. (BAWE-E)

(16) <u>Tragically</u>, **however**, when he realises that the reality he has created out of a romantic delusion exists 'only in relation to her' (Hulse 68, 30 August), and that she no longer wishes to be a part of his reality, since her reality consists only of Albert and her siblings, he sees no option but to commit suicide. (BAWE-E)

As illustrated above, non clause-initial *however* can be preceded by a number of elements including Subject, as in (13), the circumstantial Adjunct as in (14), the conjunctive Adjunct, as in (15), and the modal Adjunct, as in (16). However, it is worth pointing out that according to Halliday and Matthiessen's (2004) characterization of Theme, only in the first two examples, the non clause-initial *however* is given non-thematic status. In examples (15) and (16), preceded by elements functioning as textual Theme (15) and interpersonal Theme (16), *however* is still thematic. The textual differences between the major variants of non clause-initial *however* will be further explored in Chapter 7.

In light of the high frequency of the cohesive use of the paratactic conjunction *but*, sentence-initial *but* is included in the cohesive category to reflect the overall distribution of this type across the two corpora. Furthermore, given the dual function of *yet* to be structural and cohesive conjunctions, sentence-initial *yet* is also included in the category. Therefore, for both *but* and *yet*, the default position is sentence-initial. The syntactic distribution of a group of conjunctive Adjuncts encoding adversative, replacive and concessive relations is presented in Table 4.6 below on the next page.

Table 4.6 Syntactic distributions of conjunctive Adjuncts

	C	CLEC		WE-E
	Clause- initial	Non-clause- initial	Clause- initial	Non-clause- initial
	N/million	N/million	N/million	N/million
however	451.2	120.1	1294.6	642.8
But (sentence-initial)	2607.3	-	255.3	-
Yet (sentence-initial)	45.5	-	149.7	-
nevertheless	20.7	3.3	83.4	29.6
still	6.6	5	19.6	1.6
at the same time	102.7	16.6	19	12.8
conversely	1.7	0	31.1	0.6
in comparison	0	0	5	0.3
in contrast	2.5	0	31.1	6.5
on the other hand	222.7	58	83.7	62.9
instead	16.6	0	26.1	0.6
rather	0	0	11.5	0
on the contrary	87.8	24.8	15.6	8.4
TOTAL	3565.3	227.7	2025.8	766.1
PERCENTAGE	94.0%	6.0%	72.6%	27.4%

As shown in Table 4.6, clause-initial position represents the unmarked position of conjunctive Adjuncts in both corpora. Chinese EFL learners seem to make more frequent use of clause-initial position (94.0%) than their native-speaker counterparts (72.6%). The preference for clause-initial position is an unsurprising reflection of the 'characteristically thematic' nature of conjunctive Adjuncts made in Halliday and Matthiessen (2004). Admittedly, as discussed above, a closer examination of the non-clause-initial occurrences can reveal further distinctions between thematic and non-thematic conjunctive Adjuncts. However, in the case of the former, the proportion of thematic conjunctive Adjuncts will be even higher than shown in Table 4.6.

One striking contrast between the two groups of writers with respect to the preferred position of conjunctive Adjuncts lies in the sentence-initial *but*. Chinese EFL learners' preference for sentence-initial *but* will be explored in Chapter 5. It is worth pointing

out that many scholars including Biber et al. (1999) mention the well-known prescriptive restrictions on the use of sentence-initial coordinators including *but* and *and*, but they acknowledge that these coordinators may be used in sentence-initial position for special purposes intended by the writer. The prescriptive restriction on sentence-initial *but* is reflected by its low frequency in BAWE-E. In comparison, Chinese EFL learners' preference for sentence-initial *but* represents a certain deviation from the norm. As will be shown in Chapter 5, the distinction between sentence-initial *but* and structural *but* relates not so much to the types of semantic relations they signal as to the domain or span of the relation they cover. While clause-initial *but* is confined to sentence boundary to build paratactic clause nexuses, sentence-initial *but* functions cohesively to signal a semantic relation of contrast between two clauses that are not structurally linked.

As can be seen from Table 4.6, other conjunctive Adjuncts show less variation in syntactic positions across the corpora. *However*, which is the most frequent conjunctive Adjunct in BAWE-E, is frequently found in clause-initial position (N/million = 1294.6), as is typically the case with conjunctive Adjuncts, but the frequency of non-clause-initial *however* is also worth noting (N/million = 642.8). In comparison, clause-initial and non-initial *however* in CLEC is more unbalanced (451.2 vs. 120.1). That is, non-clause-initial *however* is deployed to a less extent by Chinese EFL learners than their native-speaker counterparts. Given this apparent difference, it would be interesting to investigate the functions of *however* in different syntactic positions in CLEC and BAWE-E, which will be reported in Chapter 7.

The remaining conjunctive Adjuncts are much less frequent than *but* and *however* in both corpora. While these conjunctive Adjuncts are frequently found in clause-initial position, the non-initial position of these conjunctive Adjuncts are typically associated with cases in which they co-occur with the paratactic conjunction *but* or *and*, thereby forming paratactic enhancement.

### 4.5 Analyzing multivalent conjunctions

As indicated in Section 4.2, in cases of multivalent conjunctions, adversative and concessive meanings may overlap, which gives rise to a great deal of indeterminacy. In fact, as suggested by Halliday and Matthiessen (2004), indeterminacy is a fundamental principle of natural language. Borderline cases with varying degrees of indeterminacy with respect to the type of semantic relations encoded by multivalent conjunctions are found in both corpora, although the learner corpus has substantially more. This section illustrates briefly how the types of semantic relations encoded by multivalent conjunctions can be clarified by exploring the contextual clues and agnate structures. Due to the limited scope of this section, I focus on one example from the learner coups, which will be illustrated with a series of agnate structures. The example is given below. Further examples will be discussed in the following four chapters devoted to the investigation of individual conjunctions.

(17) Most of the criminals are punished by law, but still there are lots of criminals [sn8,s-] escape from the punishment of law. (CLEC)

Here, the paratactic *but* seems to be ambiguous between an adversative and concessive interpretation. The two alternative interpretations, each of which is accompanied by a series of agnate patterns, are explored below. Note that as indicated by the error tag, [sn8,s-] in (17) is ungrammatical. To enhance intelligibility, its grammatical counterpart, i.e. (17a) will be referred to in the discussion below.

(17a) Most of the criminals are punished by law, but still there are lots of criminals who escape from the punishment of law.

First, the direct contrast between two clauses, which is construed though two pairs of antonyms: punished by law vs. escape from the punishment of law and most of criminals vs. lots of criminals, seems to suggest an adversative interpretation of but

meaning "X and conversely Y" (Halliday & Matthiessen, 2004, p. 405). Moreover, the adversative interpretation can be supported by the associated cohesive sequences involving conjunctive Adjuncts such as *on the other hand*, *in contrast* or *conversely*. Compare (17a) with the agnate structures presented below:

- (17b) Most of the criminals are punished by law. On the other hand, there are still lots of criminals who escape from the punishment of law.
- (17c) Most of the criminals are punished by law. In contrast, there are still lots of criminals who escape from the punishment of law.
- (17d) Most of the criminals are punished by law. Conversely, there are still lots of criminals who escape from the punishment of law.

As illustrated above, the paratactic sequence of (17a) is transferred to a group of cohesive sequences, each consisting of two clauses that are not structurally linked. The adversative relation marked by these conjunctive Adjuncts is similar to *but* in (17a), except that *but* in (17a) represents of tighter grammatical integration than the cohesive conjunctions in (17b), (17c) and (17d). As indicated, these conjunctive Adjuncts are more frequently used to mark the internal adversative relation, which applies to larger text spans.

Similarly, the adversative relation can be paraphrased by a hypotactic *while*-clause, as exemplified by (17e).

(17e) Most of the criminals are punished by law, while there are still lots of criminals who escape from the punishment of law.

Here, the hypotactic conjunction *while* encodes an adversative relation between the initial main clause and the subsequent hypotactic clause in the sense of 'X and conversely Y' similar to the paratactic *but* and cohesive sequences involving *on the* 

other hand discussed above. However, unlike the paratactic relation exemplified by (17a), the sequence of which is generally fixed (Matthiessen, 1995), a hypotactic clause as in (17e) can be placed either before or after the associated main clause. See Section 4.4.1 on syntactic distributions of structural conjunctions and Chapter 6 on the positioning of while-clauses. Moreover, with the application of while, (17e) seems to border on temporal enhancement, which refers to simultaneity of events. That is, the process construed by the hypotactic while-clause takes place at the same time as the process construed by the initial main clause. Therefore, there are at least two potential interpretations of the while-clause: the adversative interpretation which is agnate with adversative but in (17a) and the temporal enhancement which is agnate with temporal enhancement as in (17f).

(17f) Most of the criminals are punished by law. At the same time, there are still lots of criminals who escape from the punishment of law.

However, as indicated, at the same time is again a multivalent conjunction encoding either temporal enhancement or adversative extension. The distinction between the two semantic categories seems to be blurred in this instance and hence (17e) involving the use of while is a less effective agnate for clarifying the multivalent status of but in (17a). However, if the conjunctive at the same time is reinforced with an initial but or yet, the adversative interpretation seems to be more plausible, hence resolving the ambiguity between temporal and adversative interpretations of at the same time. In contrast, with and at the same time, the temporal enhancement seems to be more plausible.

Adversative relation can also be argued internally, as exemplified by circumstantial element *in contrast to* in (17g) below.

(17g) In contrast to most of the criminals who are punished by law, there are lots of

criminals who escape from the punishment of law.

Here, the prepositional phrase *in contrast to most of the criminals who are punished* by law is a circumstantial Adjunct that functions to qualify the clause by comparison. It corresponds to (17c) which involves the use of *in contrast* as a conjunctive Adjunct encoding the adversative type of extension in the textual metafunction. Circumstantial element *in contrast to* is more tightly integrated into the clause than parataxis as exemplified by but in (17a), which represents tighter integration than cohesive sequences discussed above.

Having explored the potential of the adversative interpretation and a serious of associated agnate structures along the cline of integration, I will now turn to the concessive interpretation of (17a), following similar procedures. (17a) is repeated below for convenience.

(17a) Most of the criminals are punished by law, but still there are lots of criminals who escape from the punishment of law.

Unlike the adversative interpretation, which depends on the direct contrast between the propositional contents of two paratactic clauses linked by *but*, concessive interpretation indicates logical opposition between the two clauses. In other words, the propositional content of *but*-clause is country to expectation in light of the preceding clause thereby giving a sense of concessive enhancement. The concessive interpretation is also reinforced by the co-occurring conjunctive Adjunct *still*, which can be deployed on its own to encode the concessive type of enhancement between two clauses that are not structurally linked, as exemplified by (17h) below.

(17h) Most of the criminals are punished by law. Still, there are lots of criminals who escape from the punishment of law.

It is interesting to note that in order for *still* to be used as a conjunctive, it has to occur either sentence-initially as in (17h) or follow a paratactic conjunction, such as *but* in (17a). In both cases, *still* are given thematic status as textual Theme, thereby marking 'textual transition' (Halliday & Matthiessen, 2004). In contrast, in non-thematic positions, typically after the finite, *still* is no longer a conjunctive Adjunct, as exemplified by (17i) and (17j) below. Note that the same rule applies to the conjunctive and non-conjunctive use of *yet*.

(17i) Most of the criminals are punished by law, but there are <u>still</u> lots of criminals who escape from the punishment of law.

(17j) Most of the criminals are punished by law. There are <u>still</u> lots of criminals who escape from the punishment of law.

The non-thematic *still* in both cases relates to time. In the sense of Halliday and Matthiessen (2004), *still* is a modal Adjunct of temporality which relates to the speaker's expectation in relation to the time at issue. Although a sense of concession is retained in its use as a temporal Adjunct, the function to mark textual transition is lost. Note that historically, the conjunctive use of *still* is developed from its use as a mood Adjunct of temporality (Halliday & Matthiessen, 2004, p. 128).

The paratactic concession encoded by *but* in (17a) is also agnate with a cohesive sequence involving *nevertheless*, as exemplified by (17k) below.

(17k) Most of the criminals are punished by law. Nevertheless, there are <u>still</u> lots of criminals who escape from the punishment of law.

As noted above, with the application of *nevertheless*, *still* has to take up non-thematic position after the finite and hence no longer a conjunctive Adjunct. The co-occurrence

of nevertheless and still gives rise to ungrammaticality, as illustrated by (171) below.

(171) Most of the criminals are punished by law. Nevertheless still there are lots of criminals who escape from the punishment of law.

On the other hand, while *yet* can be applied to encode concessive sense, it is ambiguous between adversative and concessive interpretations. Moreover, *yet* is multifunctional structural and textual, as illustrated by (17m) and (17n), respectively.

(17m) Most of the criminals are punished by law. Yet still there are lots of criminals who escape from the punishment of law.

(17n) Most of the criminals are punished by law, yet still there are lots of criminals who escape from the punishment of law.

As illustrated by the pair of examples above, the structural and textual function of *yet* can be distinguished on syntactic properties. In both cases, the combination of *yet* and *still* represents a very marked choice, if not totally unacceptable.

In the above, I have explored the pattern of agnation holding between paratactic concession and cohesive concession. There is still another agnate structure, which is more prototypical of concessive enhancement, namely hypotactic *although*-clause. The hypotactic conjunction *although* has the advantage of being a monovalent conjunction of concession. Therefore, it is one of the most commonly adopted diagnostic for concessive sense of multivalent conjunctions such as *but*, *yet*, *however*, etc. The hypotactic agnate of (170) is presented below.

(170) Although most of the criminals are punished by law, still there are lots of criminals who escape from the punishment of law.

(17o) is an instance of co-relative form of *although*...*still*. The hypotactic clause is introduced by *although*, whereas the subsequent main clause in the clause nexus is marked by *still*, which functions to enhance the concessive sense marked by *although*. It would have been equally possible for *although* to correlate with *yet* or *nevertheless*. As suggested by Halliday and Matthiessen (2004), both parataxis and hypotaxis may involve correlative conjunctions, where a second conjunction marks the primary clause. Consider (17p) below.

(17p) Although most of the criminals are punished by law, yet there are lots of criminals who escape from the punishment of law.

Finally, there is an option to realize the concessive relation circumstantially, as in (17q).

(17q) In spite of the fact that most of the criminals are punished by law, there are lots of criminals who escape from the punishment of law.

To sum up, although example (17a), which is the grammatical counterpart of (17), is ambiguous between an adversative and concessive interpretation of *but*, exploration of its agnate structures along the line of grammatical integration and contextual clues, the use of *still* in particular, seems to shed light onto the ambiguity. In fact, as indicated in Chapter 1, agnate structures will be consistently explored in the investigation of adversative and concessive conjunctions throughout this dissertation.

## Chapter 5 Co-occurrence Patterns of but in CLEC and BAWE-E

This chapter aims to explore the co-occurrence patterns of *but* in CLEC and BAWE-E in order to shed light on the type of logico-semantic relations it encodes. Given the multivalent status of *but*, the lexico-grammatical environment of the conjunction plays a significant role in distinguishing between different senses of the conjunction. As stressed by Halliday and Matthiessen (2004), lexis and grammar are two poles of a single cline. The choice of lexical items and choice of grammatical categories are interconnected (ibid).

The chapter starts with an overview of the co-occurrence patterns of *but* across the two corpora (Section 5.1). Two frequent co-occurrence patterns, namely *but in fact* and *but I think* across the two corpora are described and compared in two subsequent sections (Sections 5.2 and 5.3). Particular attention is paid to the complementarities between the functions of *but* and those of *in fact* and *I think* co-occurring with the conjunction across the two corpora.

## 5.1 An overview of the co-occurrence patterns of but in CLEC and BAWE-E

The conjunction *but* is restricted to the initial position of a clause, or is "inherently thematic", as suggested by Halliday and Matthiessen (2004, p. 83). What immediately follows *but* in R1 (first right) position will be explored to reveal its co-occurrence patterns. Given the scope of this section, I will not attempt to make a complete description of the co-occurrence patterns of *but*. Instead, I will focus on a few of the most representative patterns, particularly on patterns that are uniquely frequent in the learner corpus or the native-speaker corpus.

First, the ten most frequent words co-occurring with *but* in the first right position in the CLEC and BAWE-E corpus are set out in Table 5.1, ranged in order of their

frequency of occurrence. Due to the different sizes of the corpora, the raw frequency of each word co-occurring with *but* in R1 in the two corpora is normalized to show its frequency in every 1 million words so that the figures can be comparable. As mentioned in Chapter 4, Section 4.1, *but* is much more frequent in CLEC than BAWE-E. This trend is also reflected in the co-occurrence patterns presented in Tables 5.1 below.

Table 5.1 The 10 most frequent words co-occurring with but in R1 in CLEC and BAWE-E

Rank		CLEC ,757 tokens)		<b>BAWE-E</b> (3,212,488 tokens)		
	R1	N/million	R1	N/million		
1	I	469.5	also	70.4		
2	also	401.6	the	66.3		
3	the	343.6	it	53.2		
4	in	255.8	in	26.5		
5	it	238.5	this	25.8		
6	we	161.5	not	21.2		
7	he	149.9	a	18.4		
8	they	138.3	is	18.1		
9	if	121.7	as	17.1		
10	some	119.2	they	16.2		

The first view of the data presented in Tables 5.1 reveals considerable variation between Chinese EFL learners and native-speakers' writing with respect to how *but* is used, i.e. the way it co-occurs with other words.

First, while some items such as *also*, *the*, *in*, *it*, and *they* co-occur with *but* in both corpora frequently, others are uniquely frequent in either the Chinese EFL learner corpus or the comparable native corpus. For instance, of high interest is the first person pronoun *I*, which represents the most frequently co-occurring word immediately to the right of *but* in CLEC. In contrast, *but I* is much less frequent in BAWE-E. Note that the frequency of *but I* in BAWE-E is not presented in Table 5.1

due to its low frequency. Given the high frequency of *I* co-occurring with *but* in CLEC, the syntactic and semantic patterns of *but I* in CLEC will be further explored and compared with those in BAWE-E in Section 5.3.

The second major difference between the frequently co-occurring words immediately to the right of *but* in BAWE-E and those in CLEC set out in Tables 5.1 above concerns the grammatical categories represented by these words. As shown in Table 5.1, overall, CLEC includes more personal pronouns (*I, it, we, he, they*) than BAWE-E (*it, they*). Personal pronouns co-occurring with *but* in CLEC also differ from those in BAWE-E with respect to the type of entities they refer to. It is found that while the latter favors the non-human subject *it,* the former favors personal pronouns denoting human beings. This could suggest that native speakers' writing is more impersonal and detached, which is typical of academic prose. In contrast, Chinese EFL learners' writing represented by CLEC is less academic.

In contrast to the predominant pattern of personal pronouns co-occurring with *but* in CLEC, co-occurring words immediately to the right of *but* in BAWE-E represent more varied grammatical categories, including not only personal pronouns, but also adverbs (*also* and *not*), prepositions (*in*), finites (*is*), conjunctions (*as*), and demonstratives (*the* and *this*). The adverb *also* represents the most frequent co-occurring word to the right of *but* in BAWE-E and the second most frequent co-occurring word to the right of *but* in CLEC, respectively. It functions as an optional marker of the correlative conjunction *not only...but also* which is more typically used to express additive paratactic extension between elements (Halliday & Matthiessen 2004, p. 405). However, since our focus is on adversative, replacive and concessive relations, the additive relation marked by *but also* will not be discussed further despite its high frequency in both corpora. The other adverb *not*, being the sixth most frequent co-occurring word of *but* in BAWE-E, is strongly associated with the 'replacive' subtype of paratactic extension (p. 405). The replacive relation encoded by *but not* 

holds between 'elements of a figure' rather than figures as a whole (cf. Halliday & Matthiessen, 2004, p. 492). Note that *but not* is apparently interchangeable with the correlative conjunction *not...but*.

Unlike the two adverbs mentioned above, i.e. also and not, which co-occur with but in rather fixed uses to express only a certain type of logico-semantic relation, the preposition in (in both BAWE-E and CLEC) following but comes in various forms and covers a wide range of meanings. In the position immediately following but, the preposition in combines with various other words to form prepositional phrases and represents different types of Themes accordingly. For example, in may form circumstantial Adjuncts of time, place and manner. These circumstantial Adjuncts coming after but represent marked choices of topical Themes, which are in sharp contrast with the personal pronouns functioning as unmarked topical Themes mentioned earlier in this section. In other cases, the preposition in forms idiomatic combinations of adverbs (Adjuncts) such as in reality, in fact and in general, etc. These expressions are modal comment Adjuncts which function to express the speaker or writer's judgment on or attitude to the content of the message (Halliday & Matthiessen, 2004). According to Halliday and Matthiessen, modal comment Adjuncts represent interpersonal Themes and are characteristically thematic. In the light of the flexibility of in to be a constituent of a variety of in-phrases discussed so far, only the most representative pattern will be explored in this chapter. The expression in fact, which turns out to be the most frequent in-phrase co-occurring with but in CLEC, will be described and compared with that in BAWE-E in Section 5.2.

## 5.2 Analysis of but in fact

As discussed in the previous section, the preposition *in* following *but* can be a constituent of different *in*-phrases and is thus flexible with respect to the type of Themes it can represent. For instance, some of the most notable *in*-phrases following *but* in CLEC and BAWE-E are set out in Tables 5.2 below on the next page.

Table 5.2 in-phrases co-occurring with but in CLEC and BAWE-E

Rank	CLEC			BAWE-E		
	in-phrase	N	N/million	in-phrase	N	N/million
1	in fact	93	77	in the (NP)	54	16.8
2	in + year number	62	51.3	in a (NP)	25	7.8
3	in my opinion	9	7.5	in fact	14	4.4
4	in order to	8	6.6	in reality	9	2.8
5	others	119	98.5	others	141	43.9
	TOTAL	291	112.6	TOTAL	243	75.6

As can be seen from Tables 5.2, the expression *in fact* co-occurs with *but* most frequently in CLEC, whereas in BAWE-E *in fact* is a much less frequent co-occurring word of *but* in comparison with *the* and *a*, both of which function as the initial word of a nominal group. Apart from the differences in overall frequency as indicated in Table 5.2, *but in fact* in the two corpora is also found to be associated with different syntactic positions, and this is the most obvious difference between the uses of *but in fact* in CLEC and those in BAWE-E. While native-speaker writers' use of *but in fact* is frequently associated with *but* used within a clause complex, Chinese EFL learners' use of *but in fact* is characterized by the sentence-initial *but*. This trend agrees fairly well with the predominant use of sentence-initial *but* in CLEC mentioned in Chapter 4. The differences between the two types of *but in fact* used by the two groups of writers will be discussed in four separate sub-sections below.

## 5.2.1 Sentence-initial but co-occurring with in fact in CLEC

Among the 93 instances of *but in fact* in CLEC, 82 instances are found to be associated with the sentence-initial *but*. Given the strong preference for the sentence-initial *but* to co-occur with *in fact* in CLEC, it is interesting to ask under what conditions is *but* used in the sentence-initial position followed by *in fact*. This section therefore explores the syntactic and semantic patterns that are associated with sentence-initial *but* co-occurring with *in fact* in CLEC.

To illustrate the dominance of the sentence-initial *but* co-occurring with *in fact* in CLEC, the first 20 concordance lines are listed in Figure 5.1below.

#### N Concordance [wd4,s-] worried about water for so long. But in fact, the earth lacks of fresh water 2 from rain, rivers, and wells, and so on. But in fact, fresh water is not enough. There so on. So they often wast [fm1,-] water. But in fact, fresh water is very limitted 4 is able to be drinken [fm2,-] and used. But in fact, the fresh water is very limitted fresh water can be got by digging wells. But in fact, fresh water is not enough. First, 5 6 and the well-water is [vp3,s-] plenty. But in fact, the fresh water is in global 7 river [np6,s-], leak [wd3,s-] and so on. But in fact, fresh water is very [ad2,-1] 8 we can use it for million [np6,s-] years. But in fact, fresh water is [wd4,1-2] global 9 in lakes, in wells, in streams, etc. But in fact, the global [wd2,1-1] is short of 10 such as the rain water, the river water, etc. But in fact, the shortage of fresh water is 11 from rain, river, well [np6,3-] and so on. But in fact, the fresh water is [wd4,-2] global 12 how could people use it up? [sn1,s-] But in fact, the situation of fresh water is 13 from the rain, the rivers and the wells. " But in fact, fresh water is very rare [wd3,s-3] get fresh water from everwhere [fm1,-] . But in fact, fresh water is very limited. The 14 the wells, the ices and so on. [sn2,s-] But in fact, global shortage of fresh water 15 16 ground in [pp2,-1] earth is fresh water too. But in fact, there is a global shortage of 17 wells. [sn1,s-] Also there is so much rain. But in fact, fresh water is very very [wd6,1-] 18 water and other water sources. [sn2,s-] But in fact it [pr1,s-] is in short [wd2,1-2] of as raining [wd2,-1] water, river [np6,s-] . . . But in fact, the global shortage of fresh

Figure 5.1 Concordance lines of but in fact from CLEC

In addition to the predominant pattern of *but* in sentence-initial position, the concordance lines in Figure 5.1 also reveal another interesting point, that is, they are restricted to the topic of "global shortage of fresh water". In fact, overall, only a small number of instances of the sentence-initial *but in fact* are not associated with this topic. This suggests that Chinese EFL learners' choice of *but in fact* may be motivated by the explicit reference to the Chinese equivalent of *but in fact* given in the directions of the writing task, which asks students to state their views on "The global shortage of fresh water" after presenting their arguments against popular views to the contrary.

To illustrate the typical use of *but in fact* in CLEC, concordance No. 14 in Figure 5.1 above is expanded to show the full context of the cohesive sequence involving

sentence-initial *but in fact*, as illustrated by example (1):

(1) People always thinks [vp3,2-] human will have the fresh water for ever. There are rains, snows and many rivers. It seemed that we could get fresh water from everwhere [fm1,-]. **But** in fact, fresh water is very limited. (CLEC)

Unlike *but* used within clause complex, which is restricted structurally to the initial position of a clause to mark a relation of contrast between two paratactically linked clauses, sentence-initial *but* as exemplified by (1) functions cohesively to signal a contrast between the sentence it introduces and what has gone before. In (1), the sentence introduced by *but* forms a contrast with three sentences in the preceding text. In order to bring out the cohesive nature of sentence-initial *but*, example (1) is presented diagrammatically in Figure 5.2 below.

I	α People always thinks [vp3,2-]		Claim1
	β	human will have the fresh water for ever.	
II	There are	Grounds	
III	It seemed	Grounds	
	]]].		

IV	But in fact, fresh water is very limited.	Claim2
		(Counter-
		claim)

Figure 5. 2 Representation of example (1) as a cohesive sequence

As can be seen from Figure 2, the arrow pointing from IV to the preceding text comprising I, II and III represents the anaphoric nature of the conjunctive relation signaled by the sentence-initial *but* in IV. It is clear that the preceding text, represented by the box higher than IV, formulates the rhetorical function of expressing

the ideas of people in general, which is to be contrasted with the writer's point of view expressed later in IV, i.e. the sentence introduced by but. First, what people believe to be true is made clear in I, consisting of a projecting clause "People always thinks [vp3,2-]" and its projected clause "human will have the fresh water forever". The verb "thinks" indicates that the projecting clause is a mental process clause. The content of what people think represented by the projected clause is therefore true in people's thoughts as opposed to in reality. This claim (Claim1) is then further supported by two subsequent sentences II and III serving as grounds. II (i.e. There are rains, snows and many rivers) is an existential clause, which serves to elaborate on I by giving examples. III (i.e. It seemed that we could get fresh water from everwhere [fm1,-]) continues to strengthen the point made in the existential clause. It is interesting to note that the verb seemed in III expresses a degree of likelihood or probability, which indicates that the state of affairs conveyed in that-clause is open to argument. As suggested by Halliday and Matthiessen (2004), a proposition or proposal may become arguable through being assessed in terms of the degree of probability or obligation that is associated with it.

Overall, I, II and III function to build up the expectation that what people always think is true. This expectation is then denied by the sentence introduced by *but*, i.e. IV, functioning as a counter-claim. In contrast to the representation of the preceding sentences as being non-factual, the propositional content of the sentence introduced by *but* represents the author's point of view, which is factual. Therefore, the expression *in fact* is used to reinforce the relation of contrast signalled by the initial *but* between two parts, i.e. what people always think to be true and what is reality. The function of *in fact* will be discussed in more detail in the analysis of native speakers' use of *but in fact* in the next section.

## 5.2.2 Sentence-initial but co-occurring with in fact in BAWE-E

As mentioned in the previous section, native-speaker writers' use of but in fact is

characteristically associated with *but* used within a clause complex. The native-speaker corpus, i.e. BAWE-E, only yields two instances of sentence-initial *but* in fact. In this section, the function of *in fact* in these two instances will be explored in the context of sentence-initial *but*.

First, let's consider example (2):

(2) Christian Moosbrugger is a man whose appearance betrays his character. Large, broad-shouldered and exceedingly strong, with "harmless-looking great fists", he has to the onlooker a good-natured and kindly face, and gives off an aura of innocence and goodness. **But** in fact Moosbrugger is anything but harmless. (BAWE-E)

Similarly, example (2) is represented as a sequence of cohesively linked sentences in box diagrams in Figure 3 below.

I	Christian Moosbrugger is a man [[whose appearance betrays his Claim	
	character]].	

II	$\times \beta$	Large, broad-shouldered and exceedingly strong, with	Grounds			
		"harmless-looking great fists",				
	α1	he has to the onlooker a good-natured and kindly face,				
	α+2	and gives off an aura of innocence and goodness.				



III	But in fact Moosbrugger is anything but harmless.	Grounds

Figure 5.3 Representation of example (2) as a cohesive sequence

Like example (1) discussed in the previous section, the semantic relation set up by the sentence-initial *but* in (2) is not structural but cohesive. In other words, the relation is not limited to the clause complex containing the conjunction, but is extended to the

preceding text. Here, *but* signals a contrast between III and the preceding clause complex, i.e. II. What Christian Moosbrugger appears to be is described in II and is then contrasted with his true nature stated in *but*-clause, i.e. III. Both II and III serve as grounds or elaboration of the claim made in I, namely *Christian Moosbrugger is a man* [[whose appearance betrays his character]].

As indicated in the previous section, the expression *in fact* is mainly used for the purpose of reinforcing the contrast signaled by the sentence-initial *but*. While the function of *but* is mainly textual, the reinforcing function of *in fact* can be accounted for from the perspective of the interpersonal metafunction of language introduced by Halliday and Matthiessen (2004). Interpersonal metafunction as defined by Halliday and Matthiessen (2004, p. 61) is the resource for "enacting social relationships". Among the resources realizing the interpersonal metafunction, modal comment Adjuncts function to express the speaker or writer's judgment on or attitude to the content of the message. *In fact* is identified by Halliday and Matthiessen (2004, p. 130) as an adverb serving as a comment Adjunct meaning "factual". With the use of *in fact*, the writer expresses his judgment on or attitude to the content of the *but*-clause as being factual which is seen as a contrast to the non-factual state-of-affairs represented by the preceding text. Traugott (1997) traces the evolution of both the textual and interpersonal senses of 'in fact', from the original experiential abstract locative sense of 'in' + 'fact'.

In a position immediately after the sentence-initial *but* as textual Theme, the comment Adjunct *in fact* in (2) functions as interpersonal Theme. Comment Adjuncts represent interpersonal Themes and are characteristically thematic (Halliday & Matthiessen, 2004). However, unlike *but*, which is restricted to the initial position of a clause or sentence, "inherently thematic" as indicated by Halliday and Matthiessen (p. 83), the characteristically thematic element *in fact* can be placed in non-thematic positions. For example, compare (2) discussed above with (2a) below, in which *in fact* is

inserted between the Finite is and the Predicator anything but harmless.

(2a) Large, broad-shouldered and exceedingly strong, with "harmless-looking great fists", he has to the onlooker a good-natured and kindly face, and gives off an aura of innocence and goodness. **But** Moosbrugger is in fact anything but harmless.

Here, but in sentence-initial position is used in the same way as it is used in (2). That is, it marks a cohesive relation of contrast between two sentences instead of forming a structural link between two paratactically related clauses. However, in fact in (2a) has a different function from the one in (2). Removed from the position immediately after but, in fact in (2a) functions to intensify the negative sense conveyed by the Predicator anything but harmless rather than to express the attitude conveyed by the whole sentence introduced by but as in (2). While in fact in (2) is a comment Adjunct functioning as interpersonal Theme, in (2a), in fact has lost its thematic status and is no longer a comment Adjunct. According to Halliday and Matthiessen's (2004) classification of mood Adjuncts, in fact in non-thematic position as exemplified by (2a) is serving as a mood Adjunct of intensity expressing counter-expectancy. Admittedly, in fact as a mood Adjunct of intensity overlaps semantically with its use as a comment Adjunct. However, the difference can be shed light from syntactic properties. Mood Adjunct of intensity is syntactically more restricted. As Halliday and Matthiessen (ibid, p. 127) observe, "Adjuncts of intensity occur medially or finally in the clause, but seldom initially—they cannot be thematic".

The different categories of Adjunct represented by *in fact* in (2) and (2a) and their preferred positions also correspond to the size of unit they can apply to in a clause. As suggested by Quirk et al. (1985), the scope of Adjunct adverbials can be either predicational or sentential. Generally speaking, predicational Adjuncts relate to verbal and post-verbal elements (ibid, p. 511). They typically modify the whole clause in which they occur. Compared with predicational Adjuncts, sentential Adjuncts are

more peripheral to the clause structure (ibid.). It is clear that while the thematic *in fact* in (2) assumes sentential scope, the one in (2a) has a narrower scope over the Predicator *anything but harmless*.

The discussion so far has suggested that sentence-initial *but* co-occurring with *in fact* functions to highlight the factual state-of-affairs expressed by the sentence introduced by *but in fact*, which is a contrast to the preceding text representing non-factual state-of-affairs. However, the other instance of the sentence-initial *but* co-occurring with *in fact* in BAWE-E reveals that *but in fact* can fulfill a different function from what has been discussed so far. Consider example (3):

(3) He gradually saw less and less of his mates. **But** in fact they were not avoiding him. He was avoiding them (BAWE-E)

In a similar fashion, example (3) is presented diagrammatically as a sequence of cohesively related sentences in Figure 5.4 below.

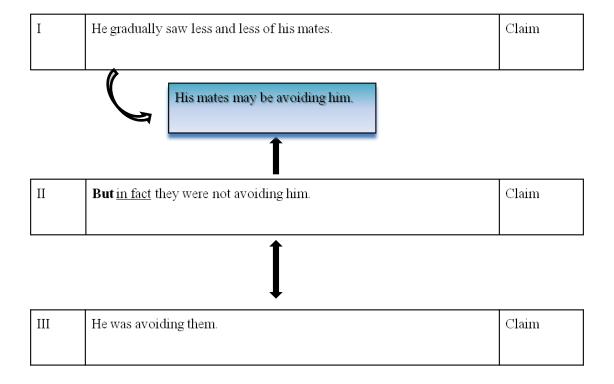


Figure 5.4 Representation of example (3) as a cohesive sequence

Note that III is also presented in Figure 4 above, because of its close connection with II in a replacive relation, symbolized by the two-way arrow.

Here, the sentence-initial but, like the one in example (2) discussed earlier, is used cohesively to mark a contrast between the sentence it introduces, i.e. II and the preceding sentence, i.e. I. The cohesive link is represented by the arrow pointing from II to I. However, the relation encoded by but in (3) is different from what has been discussed so far in that the contrast is not expressed on the surface level between the propositional contents of the two cohesively related sentences. In other words, I, namely he gradually saw less and less of his mates is not a representation of the nonfactual state of affairs to be contrasted or denied by the sentence introduced by but, i.e. II. Instead, as can be seen from Figure 5.4 above, the propositional content of II they were not avoiding him is in contrast with some potential counterargument his mates are avoiding him associated with the preceding sentence, i.e. I. Although this potential counterargument is not explicitly mentioned in the text, the writer expects that the reader may be under such an assumption after reading I. Therefore, by using the sentence-initial but followed immediately by in fact, the writer not only denies the reader's potential expectation from reading I, but also emphasizes that the propositional content conveyed by II represents the factual state-of-affairs and thus deserves more attention. The discourse function of in fact is still in the interpersonal domain as discussed earlier. Within the interpersonal domain, the thematic in fact as exemplified by (4) functions as a comment Adjunct, assigning an attitude to the proposition conveyed in the sentence introduced by but.

On the other hand, in view of the implicit nature of the contrast in (3) discussed above, in fact can be interpreted differently, i.e. as a conjunctive Adjunct signaling "internal contrastive" type of adversative relation (Halliday & Hasan, 1976). According to Halliday and Hasan, the internal contrastive sense is to be distinguished from the

external contrastive sense in that with the former, the meaning is 'as against what the current state of the communication process would lead us to expect, the fact of the matter is...'. Under such an interpretation, example (3) is paraphrasable as its close agnate, exemplified in (3a) below:

(3a) He gradually saw less and less of his mates. <u>In fact</u> they were not avoiding him. He was avoiding them

Like the sentence initial *but* in (3), the contrast marked by the sentence-initial *in fact* in (3a) is not determined by the lexical content of the two sentences, but is perceived via some expectation arising from the context. However, without the preceding *but*, *in fact* in (3a) is given thematic status as textual Theme instead of as interpersonal Theme. According to Halliday and Hasan's (1976) classification of adversative type of conjunctions, *in fact* in (3a) is an instance of cohesive conjunction, expressing "contrastive avowal" (p. 253). Halliday and Hasan call this an "avowal" since the conjunction takes the form of an assertion of veracity (ibid).

However, it should be noted that when *in fact* is used on its own without a preceding *but*, it does not necessarily indicate contrast. Martin (1992) argues that *in fact* is a conjunction marking internal similarity. He claims that 'contrast' is not the basic meaning of *in fact*, and that it can make a concessive relation explicit only when it cooccurs with a contrastive conjunction such as *but*, since 'counterexpectation is not part of the meaning' (1992, p. 213). Similarly, Halliday and Matthiessen (2004, p. 541) classify *in fact* as one of the elaborating conjunctive Adjuncts used for the meaning of "clarification", which signals that "the elaborated element is not simply restated but reinstated, summarized, made more precise or in some other way clarified for purposes of the discourse".

### 5.2.3 Co-occurrence of but in fact within clause complex in BAWE-E

As mentioned, occurrences of *but in fact* in BAWE-E are characterized by instances of *but* used as a structural conjunction within a clause complex. Overall, BAWE-E yields 12 instances of *but in fact* where *but* is used as a structural conjunction. This section explores the function of *but in fact* used within the clause complex by considering two systems identified by Halliday and Matthiessen (2004) that determine how one clause is related to another, i.e. the degree of INTERDEPENDENCY or TAXIS and the LOGICO-SEMANTIC RELATION.

For an overview, concordances of *but in fact* used within clause complex are shown in Figure 5.5 below.

```
Concordance
1
       did not consist of the previous four elements but in fact a fifth element, the quintessence.
2
      what the audience may assume to be chance but in fact is stated as divine planned and
3
      the use of primates in laboratory experiments but in fact states that it is permissible if it can
4
          of the Trobriand Islanders as non-religious but in fact they are deeply rooted in strongly
5
          were brought in as a temporary measure, but in fact was never abandoned. It was finally
6
         centre or the 'heart' is no longer knowable, but in fact filled with darkness. When there is
7
     character that they presume Angel has found, but in fact they are damning her. See Genesis
8
        groups outlined above is not just perceived, but in fact very real. Current legislative is
9
      access to the deepest recesses of our heart, but in fact they evaluate us superficially. Pity
10
               the past in ways that are meaningful, but in fact they are accounts that help
11
        public good . . . claim to speak for the world but in fact speak only for themselves." Indeed,
12
      may appear to be based on individual choices but in fact can be seen to relate to a feeling of
```

Figure 5.5 Concordance lines of but in fact from BAWE-E

As can be seen from Figure 5.5, one of the most obvious features associated with *but* in fact within the clause complex is that of ellipsis. Eight instances (Concordances No.1, 2, 3, 5, 6, 8, 11 and 12) but in fact illustrated in Figure 5.5 are associated with ellipsis. The use of ellipsis in these instances serves as evidence that but functions as a structural conjunction instead of as a cohesive conjunction. As Halliday and Matthiessen (2004) suggest, structural ellipsis is typical of clause nexuses. The

connection between ellipsis and coordinated clauses is also observed in Biber et al. (1999).

To further illustrate the function of ellipsis, one of the examples of *but in fact* from BAWE-E involving ellipsis is analyzed in detail below.

(4) This 'place' did not consist of the previous four elements **but** in fact a fifth element, the quintessence. (BAWE-E)

In (4), the subject, the finite and the predicator in *but*-clause are all ellipsed. The use of ellipsis enables the clause introduced by *but* to emphasize the part that is restated or corrected by the corresponding element in the preceding clause. It is the complement *the previous four elements* that is replaced by what comes immediately after *but in fact*, i.e. *a fifth element, the quintessence*. Alternatively, in a cohesive sequence, when *but* is used in the sentence-initial position, the ellipsed elements have to be restored, as illustrated by (4a) below.

(4a) This place did not consist of the previous four elements. **But** in fact it consists of a fifth element, the quintessence.

Note that although *but* in this example indicates a similar relation of contrast as the one in (4), *but* used within a clause complex in (4a) is characterized by a closer link between the two clauses that are paratactically linked. As Halliday and Matthiessen (2004, p. 365) note, "the effect of combining clause into a clause complex is one of tighter integration in meaning". It can thus be said that the use of ellipsis not only evidences the use of *but* as a structural conjunction, but also serves to enhance the tight integration in meaning expressed by the paratactic clause nexus.

When but co-occurs with in fact within clause complex, they differ with respect to

their functions. While *but* functions as a structural Theme indicating the paratactic replacive relation, which is a subtype of paratactic extension, *in fact* is used to intensify the relation already expressed by *but*. As has been discussed in the previous sections, the effect of *in fact* is related to its status as a mood Adjunct of intensity within the interpersonal domain. The mood Adjunct of intensity *in fact* is dependent on the element it modifies, i.e. what immediately comes after it. However, unlike *but*, *in fact* functioning as an Adjunct of intensity is optional and cannot link two clauses in a clause complex, as suggested by the ungrammaticality of (4b) below:

(4b) \*This place did not consist of the previous four elements <u>in fact</u> a fifth element, the quintessence.

On the other hand, *in fact* can function as a conjunctive Adjunct when it does not cooccur with *but*, as in (4c).

(4c) This place did not consist of the previous four elements. <u>In fact</u>, it consists of a fifth element, the quintessence.

Like (4), the negative polarity marked by *not* in (4c) is closely related to the replacive relation signaled by the sentence-initial *in fact*. However, since the conjunctive Adjunct *in fact* here indicates the replacive relation by cohesion, ellipsis is not allowed.

As seen above, in addition to ellipsis, but in fact within a clause complex is also frequently associated with negative polarity. The negative polarity marker not is traditionally considered as a common correlative of but. The sense of not...but is referred to as "correction" by Halliday and Hasan (1976, p. 254). According to them, a group of conjunctions including instead, rather and on the contrary express the "corrective" subtype of adversative relations. However, it is interesting to note that

but is excluded from the "corrective" subtype of the adversative relations in Halliday and Hasan. This could be due to their focus on cohesive conjunctions marking relations between clause complexes instead of between sub-clausal elements. In contrast, Halliday and Matthiessen (2004) classify not...but as a marker of paratactic extension, which is used to signal the "replacive" relation. According to them, "replacive" relation signals that one clause is presented as being in total or partial replacement of another (p. 407). Halliday and Matthiessen emphasize that in this type of relation, the sense of replacement is typically realized by "a shift in polarity" (p. 398).

The following examples from BAWE-E illustrate the connection between negative polarity and the replacive relation signaled by *but* co-occurring with *in fact*.

- (5) This 'place' did <u>not</u> consist of the previous four elements **but** <u>in fact</u> a fifth element, the quintessence. (BAWE-E)
- (6) The law in the UK dose <u>not</u> out rule the use of primates in laboratory experiments **but** <u>in fact</u> states that it is permissible if it can be shown that the use of a "lower" species could not be used within the experiment (Animal act 1986). (BAWE-E)
- (7) However the inequalities did <u>not</u> end there to try and offset the ever increasing cost of drugs which were being over prescribed prescription charges were brought in as a temporary measure, **but** <u>in fact</u> was never abandoned. (BAWE-E)
- (8) In sum, the injustice arising from the problem of corporate groups outlined above is <u>not</u> just perceived, **but** <u>in fact</u> very real. (BAWE-E)
- (9) The centre or the 'heart' is <u>no longer knowable</u>, **but** <u>in fact</u> filled with darkness. (BAWE-E)

As can be seen from these examples, the function of negative polarity is to deny a certain property of the Subject which is ellipsed in the *but*-clause. The part denied by negative polarity is replaced by the corresponding element in the *but*-clause. The

replacive relation is reinforced by in fact functioning as a mood Adjunct of intensity.

On the other hand, while negative polarity is a typical feature of the replacive relation signaled by *but* co-occurring with *in fact*, it is also possible to scale the negative sense down by the resource of modality. According to Halliday and Matthiessen (2004, p. 116), the term modality refers to "the scales of probability and usuality". In a proposition, modality means likely or unlikely, while in a proposal, it means desirable or undesirable. The degree of the modality scale ranges from high to medium to low (Halliday & Matthiessen, 2004).

The following example from BAWE-E illustrates how resources of modality, particularly modality of low value, relate to the sense of replacement in paratactically linked *but*-clauses containing *in fact*.

(10) Narratives <u>may appear</u> to be stories that construct the past in ways that are meaningful, **but** <u>in fact</u> they are accounts that help individuals see themselves in the future. (Turner, 2004: 148) (BAWE-E)

Unlike negative polarity, the resource of modality realized by may + appear in (10) does not function to deny the proposition completely but to attach to it a degree of likelihood. As suggested by Halliday and Matthiessen (2004), a proposition may become arguable through being assessed in terms of the degree of probability that is associated with it. Modal finite may represents implicit subjective probability of low value. The verbal group consisting of the finite modal operator may and the verb appear in (10) enables the proposition argued in the clause preceding the but-clause to be interpreted as the imaginary state of affairs. The imaginary or possible state of affairs is then reformulated by the but-clause, which represents the factual state of affairs. The factual state of affairs represented by the but-clause is then again reinforced by in fact functioning as a modal comment Adjunct. As mentioned earlier,

in fact coming after but operates within the interpersonal domain of language. Modality is also a resource to realize the interpersonal metafunction of language (Halliday & Matthiessen, 2004). From the interpersonal perspective, example (10) can be seen as an exchange between the writer and the reader about the validity of the Subject, i.e. narratives. The probable state of affairs about narratives marked by may appear is in contrast with the strongly valid proposition marked by in fact in but-clause, which embodies the communicative purpose intended by the writer.

## 5.2.4 Co-occurrence of but in fact within clause complex in CLEC

This section discusses the use of *but in fact* within the clause complex in CLEC. As indicated, in a sharp contrast to the predominant use of sentence-initial *but in fact* in CLEC, there only 12 instances of *but in fact* within a clause complex. See Figure 5.6 below.

```
N Concordance
     [sn2, s-] As a sophomore I have much more spare time now, but in fact, I still cannot find sufficient time to practise what I
       . People also cook many good things for the ghosts to "eat", but in fact they eat the food all by themselves! I think it's a
3
        [sn9,-] even though [fm1,-] we can read some references, but in fact it's not enough. These is [vp3,1-3] the usual
        have this fact for its basis." These words sound reasonable, but in fact, they are not correct completely. Money is one
       ,-] can be awarded to them to get a commonly desired job, but in fact, those who have better family background are
       is trust? Trust is often thought to be similar with "to believe", but in fact it's more than that. When you say "I believe him",
       this place, you can write down what you want to say mostly but in fact [pp2,-] you can't say; You can write down all
8
       [wd3,s-] in an Ivory [fm3,-1] Tower and out of the society, but in fact, the society is important to us as [wd4,s-] anyone
9
             .[sn1,s] Many people know that "haste makes waste", but in fact, many people may nelgct [fm1,-] it [pr1,s-] when
10
             for its delicacy. Maybe you think it is difficult to make, but in fact it is quite easy if you make it according to the
11
         time one want [vp3,1-] to complete the thing more quickly but in fact he can't get what he wishing. [vp4,1-] Why would
```

Figure 5.6 Concordance lines of but in fact from CLEC

Figure 5.6 above shows a very different profile of *but in fact* from the one from BAWE-E presented in the previous section. As discussed, subject ellipsis and negative polarity are two distinguishing properties of the paratactic replacive relation signaled by *but* co-occurring with *in fact* in BAWE-E. However, as illustrated by Figure 5.6, neither subject ellipsis nor negative polarity is found in the co-text of *but in fact* in CLEC.

To further illustrate Chinese EFL learners' typical use of *but in fact* within the clause complex, one of the concordance lines presented in Figure 5.6 is analyzed below.

(11) Every university graduate should be equal, then equal opptunities [fm1,-] can be awarded to them to get a commonly desired job, but in fact, those who have better family background are more likely to get the job no matter whether they are more capable or not than others, which is one of the phenomena mentioned by George Orwell --- Some are more equal than others. (CLEC)

Here, *but* is used as a structural conjunction within one clause complex. The logicosemantic and tactic relations realizing the paratactic clause nexus are analyzed in Figure 5.7 below.

1	α	Every university graduate should be equal,	
$\times \beta \alpha$ then equal opptunities [fm1,-] can be awa		then equal opptunities [fm1,-] can be awarded to them	
	$\times \beta \times \beta$	to get a commonly desired job.	
but in fact, those [[who have better family backgroun get the job		but in fact, those [[who have better family background]] are more likely to get the job	
	$\times \beta \alpha$ no matter whether they are more capable or not than others,		
	$\times\beta = \beta 1$ which is one of the phenomena mentioned by George Orwell		
	$\times \beta = \beta 2$ Some are more equal than others.		

Figure 5.7 Logico-semantic and tactic relations of example (11)

As can be seen from Figure 5.7, structural *but* in example (11) does not function to link two simple clauses, but rather involves the phenomenon of "internal bracketing" or "nesting" (Halliday & Matthiessen, 2004, p. 376). They suggest that with internal nesting, what is being linked by a logico-semantic relation is not a single clause but rather a 'sub-complex' — a clause nexus in its own right (ibid). However, despite the complex logico-semantic and tactic relations of (11), as illustrated by Figure 5.7, the analysis presented below is mainly concerned with the logico-semantic relation encoded by *but* between 1 and 2.

The logico-semantic relation expressed by *but* here is not a replacive one as discussed in the previous section. As mentioned, with a replacive relation, one clause is presented as being in total or partial replacement of another (Halliday & Matthiessen, 2004). In (11), the *but*-clause, i.e. 2, does not constitute a replacement of 1. Instead, it is presented as being in contrast with 1. In other words, the ideal state of affairs presented by 1 is not denied but simply set against the factual state of affairs presented by 2 introduced by *but*. The type of contrast in this example corresponds to the adversative subtype of paratactic extension, which means "X and conversely Y" (p. 405).

Therefore, the adversative relation signaled by *but* within clause complex in example (11) can be more effectively expressed by conjunctive Adjuncts of the adversative type, such as *on the other hand* or *conversely*. Alternatively, (11) is agnate with the cohesive use of sentence-initial *but* discussed in Section 5.2.1. Compare example (11) with (11a) and (11b) below.

(11a) Every university graduate should be equal, then equal opptunities [fm1,-] can be awarded to them to get a commonly desired job. On the other hand, those who have better family background are more likely to get the job no matter whether they are more capable or not than others, which is one of the phenomena mentioned by George Orwell --- Some are more equal than others.

(11b) Every university graduate should be equal, then equal opptunities [fm1,-] can be awarded to them to get a commonly desired job. But in fact, those who have better family background are more likely to get the job no matter whether they are more capable or not than others, which is one of the phenomena motioned by George Orwell --- Some are more equal than others.

It is interesting to note that when *in fact* functions as a modal comment Adjunct or as a conjunctive Adjunct, it seldom co-occurs with other conjunctive Adjuncts such as *on* 

the other hand. Compare:

(11c) \* Every university graduate should be equal, then equal opptunities [fm1,-] can be awarded to them to get a commonly desired job. On the other hand, in fact those who have better family background are more likely to get the job no matter whether they are more capable or not than others, which is one of the phenomena mentioned by George Orwell --- Some are more equal than others.

Finally, since the discussion of *but in fact* scopes over four subsections, it is necessary to provide a short summary before moving on to the other co-occurrence pattern of *but*. However, since the major findings concerning the differences between two groups of writers will be summarized in Section 5.4, here I will focus more on the theoretical and methodological aspects of the discussion.

Throughout this section and the previous sections, the functions of *but* and *in fact* in a clause have been discussed. While *but* functions as textual Theme indicating textual transitions between clauses or clause complexes, *in fact* functions as interpersonal Theme reinforcing the contrast signaled by *but*. The reinforcing function is realized either by expressing comments on the propositional content conveyed by the entire clause, or by intensifying the contrast, typically in a replacive relation. The differences between the two types of *in fact* are also discussed by exploring their close agnates. The comment Adjunct type of *in fact* is characteristically thematic and has sentential scope. In this case, the comment Adjunct *in fact* co-occurring with *but* can be used alone, which functions as conjunctive Adjunct to express the internal contrastive sense. In contrast, the mood Adjunct of intensity type of *in fact* is typically associated with subject ellipsis in the *but*-clause. The mood Adjunct type of *in fact* can be replaced with *actually* or *indeed*. The ambiguity of *in fact* as either comment Adjunct or conjunctive Adjunct discussed in this section also corresponds to Biber et

al.'s (1999) discussion on the ambiguity between stance adverbials and linking adverbials. According to Biber et al. (1999), *in fact* is an epistemic stance adverbial marking actuality and reality (p. 854). At the same time, *in fact* also functions as a linking adverbial, which connects to the preceding discourse, which it strengthens or make more specific.

The type of semantic relation signaled by *in fact* in Biber et al. (1999) thus relates to the one of elaboration in Halliday and Matthiessen (2004), which does not involve any contrast. However, when preceded by *but*, *in fact* is more likely to be used to strengthen the adversative and replacive sense marked by *but*, both of which are relations of extension. Although the primary linking function lies with the conjunction *but*, *in fact* achieves secondary linking, the two functions of *in fact* show semantic "blend", which is one type of language "indeterminacy" (Halliday & Matthiessen, 1999).

# 5.3 Analysis of but I think

As mentioned in section 5.1, the personal pronoun *I* represents the most frequent cooccurring word of *but* in the CLEC corpus. In terms of occurrences per million words, *but I* is found to be about 24 times more frequent in CLEC than in BAWE-E.
Furthermore, Chinese EFL learners' use of *but I* also differs from that of native
speakers with respect to syntactic positions. It is found that while sentence-initial *but*in CLEC covers 58% of all the occurrences of *but I*, *but I* is seldom associated with
sentence-initial *but* in BAWE-E. This finding is also consistent with the strong
tendency for *but* to be used in sentence-initial position in CLEC discussed in Chapter
4, Section 4.1.

The personal pronoun *I*, according to Halliday and Matthiessen (2004), is the item most often functioning as unmarked Theme (Subject) in a declarative clause in casual conversation. The reason, as they suggest, is because "much of our talk

consists of messages concerned with ourselves, and especially with what we think and feel" (p. 73). In the CLEC corpus, the verb *think* is most frequently associated with *but I*, as seen in Table 5.3 below.

Table 5.3 Words co-occurring with *but I* in CLEC

Rank	CLEC		
	co-occurring word	N	
1	think	63	
2	don't (think)	49	
3	didn't (think)	39	

Although *but I* is much less frequent in BAWE-E, the verb *think* represents the most frequent word (7 instances) co-occurring with *but I* in BAWE-E. All of them are associated with *but* within clause complex.

The frequent use of *but I* associated with the verb *think* in CLEC illustrated by Table 5.3 agrees fairly well with a great deal of research which reports on the colloquial style characteristic of second language learners' writing. The overuse of *I think* by non-native speakers has also been noted in earlier studies based on ICLE corpus. Ringbom (1998, p. 44), for instance, reports that *I think* was far more frequent in all seven of the learner varieties that he studied (Swedish, Finland-Swedish, French, German, Finish, Dutch and Spanish).

Similarly, Biber et al. (1999) also note that the high frequency of the verb *think* in conversation is largely due to the use of the clause *I think* to report one's own personal thoughts. They further argue that *I think* also functions as an epistemic stance adverbial of doubt to indicate lack of certainty (p. 854). The functional distinctions of *I think* made in Biber et al. (1999) is also consistent with Halliday and Matthiessen (2004), who argue that *I think* can function both as a projecting clause and as a metaphorical Adjunct of modality. However, there has not been any

established probability profile of the two categories of *I think*. This section explores the use of *I think* co-occurring with *but* in CLEC in comparison with those in the native-speaker corpus, i.e. BAWE-E, focusing on the interconnections between the type of logico-semantic relations encoded by *but* and the functions of *I think*.

#### 5.3.1 Functions of but I think in CLEC

Overall, CLEC yields 63 instances of *but I think*. To provide an overview of *but I think* in CLEC, the first 10 concordance lines are illustrated in Figure 5.8 below.

```
N Concordance
 1
          as your brother in the last couple of years. but I think the situation in China is quite different
 2
       are really capable of the job would be chosen. But I think it's a good thing because it can
 3
        some students can't find a job in a long time. But I think, general [wd2, 1-] speaking, if you are
 4
       many different celebrations in different places. But I think all the destination is to express the
 5
        life, such as motobicycles [fm1,-], cars, etc. But I think the above-mentioned five transportaters
 6
      market and most of us have to find other ways. But I think it will be better in the next few years.
 7
       jobs. They have to wait, just like your brother. But I think they can soon find a job if they are
        makes me admire my tutor is his eloquence. But I think his eloquence is mostly based on his
 9
           " was [vp6,s-] famous all over the country. But I think everyone of us must have [cc3,-3] his
10
          are not only what I refered [fm2,-] to above. But I think [vp1,-4] them as the important reasons
```

Figure 5.8 Concordance lines of but I think from CLEC

Figure 5.8 is an unsurprising reflection of the predominant use of sentence-initial *but* in CLEC, as discussed in Chapter 4, Section 4.1.

A closer examination of the concordances lies of *but I think* in CLEC reveals that they can be categorized into two broad categories according to the dual functions of *I think* to be both projecting clause in clause complexes and interpersonal Adjuncts of modality within the projected clause (Matthiessen, 1995). Furthermore, the grammatical functional distinction of *I think* is also found to be closely related to the different types of semantic relations encoded by *but*. The two categories of *I think* in relation to the meanings of *but* will be accounted for with examples from the corpus below.

There are only 6 instances of *but I think* that can be categorized in to the first category of *I think*, which functions as projecting clause in a clause complex. According to Halliday and Matthiessen (2004), *I think* is a mental clause of cognition. A general feature of mental clauses of cognition, as they (p. 199) suggest, is that "they are able to set up another clause or set of clauses as the content of thinking — as the ideas created by cognition". The relationship between the 'mental' clause and the 'idea' clause is one of projection: the 'mental' clause projects another clause or set of clauses, giving them the status of ideas or of the content of consciousness (Halliday & Matthiessen, 2004, p. 199).

Based on this view, the projecting clause *I think* preceded by *but* is used to introduce a clause that expresses the writer's personal view, which constitutes a contrast to the view held by a third person conveyed in the preceding clause or sentence. As illustrated by examples (12)-(17) below, *I think*-clause is in contrast with another preceding clause or sentence that typically involves a subject which is meant as a contrast to the subject of *but*-clause, i.e. *I*.

- (12) <u>Some people say</u> we are now in a civilised society, and we should get rid of the prison system which always reminds us of savage, violence, and inhumane things. **But** <u>I think</u> we still need it. (CLEC)
- (13) <u>Some people mind</u> [wd3,s-] that the women's movement has brought about [vp1,s-] the [wd5,s-] women more harmness [fm2,-] than goodness [wd3,s-] **but** <u>I</u> think, [sn9,s-] the women's movement do [vp3,3-] to the women more good than harm. (CLEC)
- (14) <u>Some people say</u> that no civilised society should punish its criminals: it should rehabilitate them. **But** <u>I</u> think if you do not punish them, you can not rehabilitate them. (CLEC)
- (15)In order to get great achievement, <u>they think</u> they should challenge fate. **But** <u>I</u> think one should apply for a work is relation to what he studyed [fm2,-] in school,

[sn8,s-] so he can do it better. (CLEC)

(16)Others favorit [fm1,-] change the job oftenly [fm2,-]. These people hope his life lively and their jobs challengable [fm1,-]. [sn8,s-] I'm the second class. **But** I think if someone changes his job more oftenly [fm2,-], he couldn't do them [pr3,s-] well. (CLEC)

(17) <u>Some people think</u> that women are not as good as men. **But** <u>I think</u> that women are as perfect as men. (CLEC)

As can be seen from these examples, two views on a given topic are set in contrast. The projecting clause introduced by *I think* represents the writer's view, whereas another projecting clause in the preceding text such as *some people say*, *they think*, etc. represents the view of a Subject other than the writer. The sources of the views represented by the projecting clauses and the content of the views conveyed in the projected clauses form a two-fold contrast in these examples. The two-fold contrast, corresponding to the adversative relation (Halliday & Matthiessen, 2004) is signaled by the conjunction *but* used either within a clause complex or sentence-initially. Adversative relation within a clause complex is a type of paratactic extension meaning "X and conversely Y" (Halliday & Matthiessen 2004, p. 405). On the other hand, when *but* is used in sentence-initial position as in (12), (14), (15) and (16), it functions cohesively and can be replaced by conjunctive Adjuncts marking adversative relation, such as *on the other hand*, *conversely* and *however*.

In contrast, the remaining 57 instances of *but I think* in CLEC fall into the second category. As mentioned above, the second category of *but I think* is associated with the status of *I think* to be "interpersonal Adjuncts of modality within the projected clause" (Halliday & Matthiessen, 2004). As Halliday and Matthiessen (2004, p. 592) suggest, the subject pronoun *I* attributes the attitude explicitly to the speaker/writer and thus *I think* serves as an instance of subjective interpersonal metaphor. That is, in terms of the semantic domain of modality, a projecting clause such as *I think* behaves

in similar ways as the congruent forms where the probability is construed by a finite modal operator such as *may* or an interpersonal mood Adjunct such as *probably*. However, despite this functional similarity, *I think* differs from these expression in several aspects. The similarities and differences between *I think* as interpersonal Adjunct and several of its congruent agnates will be accounted for with examples from the corpus later in this section.

The status of *I think* as an interpersonal modal Adjunct is also closely related to the "evidential parenthetical" function of *I think* discussed by Thompson and Mulac (1991a). Thompson and Mulac (1991a) suggest that verbs of propositional attitude such as *think* and *guess* with first and second person subjects are coming to be parentheticals. The projecting clause such as *I think* serves to qualify an assertion and receives less stress than the main verb in the projected clause (Thompson & Mulac, 1991a).

Having outlined the main characteristics of *I think* as an interpersonal Adjunct, it is now necessary to observe how *I think* behaves in *but*-clauses in the CLEC corpus. For instance, in (18) below, *I think* co-occurring with *but* serves as an interpersonal Adjunct of modality and is thus parenthetical.

(18) The success of the Three Musketeers lies in many sides [wd3,s-], but I think the most important one is that it models [wd3,-3] many characteristic figures. (CLEC)

In this example, *I think* is less a projecting clause indicating the state of mind of the writer as an interpersonal Adjunct of modality. Being an interpersonal Adjunct, which is a functional element of the clause, *I think* serves to qualify the assertion made in *but*-clause. *I think* serves as "subjective interpersonal metaphor" because "the subject pronoun *I* attributes the attitude explicitly to the speaker/writer" (Halliday & Matthiessen, 2004, p. 592). As a clause element of the projected clause, *I think* 

receives less stress than other clause constituents and is thus "evidential parenthetical" (Thompson & Mulac, 1991a). Therefore, this example literally means "The success of the Three Musketeers lies in many sides [wd3,s-], but the most important one is that it models [wd3,-3] many characteristic figures".

It is interesting to note that it is hard to apply this parenthetical property of *I think* to the first category of *I think* co-occurring with *but*. Compare:

(12) <u>Some people say</u> we are now in a civilised society, and we should get rid of the prison system which always reminds us of savage, violence, and inhumane things. **But** I think we still need it. (CLEC)

(12a) <u>Some people say</u> we are now in a civilised society, and we should get rid of the prison system which always reminds us of savage, violence, and inhumane things. **But** <del>I think</del> we still need it.

As seen above, *I think* in (18) functioning as Adjunct in the clause can be omitted. However, it is important to note that the presence of *I think* allows a certain degree of modality associated with the propositional content conveyed by *but*-clause. *I think* therefore represents the metaphorical realization of the semantic domain of modality (Halliday & Matthiessen, 2004). Specifically, *I think* is used to indicate 'median probability' (p. 592), which means that the truth-value of the propositional content expressed in the clause is uncertain. Under this view, *I think* in (18) has a similar function to modal Adjunct *probably*, which also realizes 'median probability'. However, while *I think* and *probably* have the same function of indicating median probability, they are characterized by different features of "orientation" and "manifestation" (Halliday & Matthiessen, 2004, p. 150). These differences can be illustrated by comparing (18) with (18a) below.

(18) The success of the Three Musketeers lies in many sides [wd3,s-], but I think the

most important one is that it models [wd3,-3] many characteristic figures. (CLEC) (18a) The success of the Three Musketeers lies in many aspects, **but** <u>probably</u> the most important one is that it creates many characteristic figures.

In terms of orientation, *I think* is subjective, while *probably* is objective. In terms of manifestation, *I think* is explicit, while *probably* is implicit (Halliday & Matthiessen, 2004). By using *probably* in (18a), the writer is uncommitted to the possibility that *the most important factor contributing to the success of the Three Musketeers is that it creates many characteristics*. In other words, through the implicit objective orientation, the writer is hiding the fact that he/she is actually expressing his/her personal views. In contrast, through the use of *I think*, the same propositional content is presented as uncertain according to the writer.

In addition to the modal Adjunct *probably*, *I think* can also be replaced by a relational clause construing modality such as *it is probable/possible*. Compare (18) with (18b) below.

(18) The success of the Three Musketeers lies in many sides [wd3,s-], but I think the most important one is that it models [wd3,-3] many characteristic figures. (CLEC) (18b) The success of the Three Musketeers lies in many aspects, but it is probable that the most important one is that it creates many characteristic figures.

In both cases, *but*-clause is associated with a degree of probability. The distinction between *I think* and *it is probable*, as suggested by Halliday and Matthiessen (2004 p.592), is that the former is "explicitly subjective", whereas the latter is "explicitly objective". As Halliday and Matthiessen suggest, the subject pronoun *I* attributes the attitude explicitly to the speaker/writer and thus *I think* serves as an instance of subjective interpersonal metaphor. By contrast, in (18b) the writer is uncommitted to the propositional content conveyed in the *but*-clause and thus (18b) represents a more

objective stance than (18). In this sense, the relational clause *it is probable* is similar with the mood Adjunct *probably* in (18a) discussed above in that both are associated with objective probability of the propositional content conveyed by the *but*-clause. On the other hand, the explicitly subjective *I think* in (18) and the explicitly objective *it is probable* in (18b) are similar in the sense of metaphorical realization of modality. Both of them represent the modality as being the substantive proposition (ibid, p. 624).

The metaphorical realization of modality construed by I think in (18) above is also agnate with the prepositional phrase in my opinion, as illustrated by (18c).

(18c) The success of the Three Musketeers lies in many sides [wd3,s-], but in my opinion the most important one is that it models [wd3,-3] many characteristic figures. Like I think, the prepositional phrase in my opinion represents subjective modality. On the other hand, while I think is a metaphorical realization of modality, the prepositional phrase in my opinion is a kind of intermediate form. As suggested by Halliday and Matthiessen (2004, p. 615), prepositional phrase, "is a kind of halfway house between clausal and non-clausal status".

The various agnate forms of *but I think* in example (18) discussed above is summarized in Table 5.4 below.

Table 5.4 Summary of the analysis of example (18) based on Halliday and Matthiessen's (2004) lexico-grammatical realizations of modality

Grammatical category	Example	Semantic modality	category	of	Realization
clause	(18) but I think the most important one is that it models [wd3,-3] many characteristic figures. (CLEC) Subjective explicit (18b) but it is probable that the most important one is that it creates many characteristic figures.	subjective objective	explicit explicit		metaphorical
prepositional	(18c) but in my opinion the most	subjective	explicit		intermediate

group	important one is that it creates many characteristic figures.			
finite modal operator	but the most important one <u>may</u> be that it creates many characteristic figures.	subjective	implicit	congruent
modal adverb	(18a) <b>but</b> <u>probably</u> the most important one is that it creates many characteristic figures.	objective	explicit	

The agnate structures of *I think* summarized in Table 5.4 all serve as evidence for the distinction between two types of *I think*. As discussed earlier, the first category of *I think* preceded by *but*, although less frequent, is used to introduce a clause that expresses the writer's personal view, which constitutes a direct contrast to the view held by a third person conveyed in the preceding clause or sentence. In case of the first type of *I think* preceded by *but*, it would be difficult to argue for a similar pattern of agnation between *I think* and the congruent forms of modality, such as *may* or *probably*. For instance, compare example (17) discussed earlier with (17a) and (17b) below.

- (17) <u>Some people think</u> that women are not as good as men. **But** <u>I</u> think that women are as perfect as men. (CLEC)
- (17a) <u>Some people think</u> that women are not as good as men. **But** <u>probably</u> women are as perfect as men.
- (17b) <u>Some people think</u> that women are not as good as men. **But** women <u>may</u> be as perfect as men.

The arguably unavailability of the congruent forms of modality as illustrated by (17a) and (17b) above, is determined by the function of *but* in the first category of *I think*, which encodes the adversative relation in the sense of "X and conversely Y" (Halliday & Matthiessen, 2004, p. 405). In contrast, *but* in (18) encodes concessive relation. Therefore, (18) discussed above is agnate with *although*-clause, as in (18d):

(18) The success of the Three Musketeers lies in many sides [wd3,s-], but <u>I</u> think the most important one is that it models [wd3,-3] many characteristic figures. (CLEC) (18d) Although the success of the Three Musketeers lies in many aspects, I think the most important one is that it creates many characteristic figures.

As illustrated by (18) and its close agate (18d), the subject of the clause following *I* think, i.e. the most important one is anaphorically linked to the subject of the preceding clause, i.e. the success of the Three Musketeers. That is, it is true that the success of the Three Musketeers "lies in many sides", the most important one is that it "creates many characteristic figures". In (18), the qualified assertion made in but-clause is a contrast to the preceding clause about the success of the Three Musketeers which is the Subject of the preceding clause. The referential link is established via the personal pronoun it in that-clause. In contrast, the first category of but I think is more typically associated with a different subject in the preceding clause, which serves as a contrast with I.

Finally, as suggested by Thompson and Mulac (1991b), *I think* as an interpersonal Adjunct of modality is integrated into the projected clause and hence the tendency to favour clauses without *that*.

## 5.3.2 Functions of but I think in BAWE-E

Despite a lower frequency, instances of *but I think* in BAWE-E fall into two categories similar to those in CLEC. As mentioned in the previous section, instances of *but I think* are categorized according to the dual function of *I think* as both projecting clause and interpersonal Adjunct of modality. While the former is associated with the adversative sense of *but*, the latter is used in the context of concessive *but*. BAWE-E shows a similar tendency as to the distribution of the two functions of *I think* cooccurring with *but*. With the exception of one instance which can be arguably

interpreted as the first category of *I think*, i.e. as projecting clause, *I think* is predominantly used as an interpersonal Adjunct of modality.

While the two fundamental functions of *I think* and *but* and the interconnections between them have been discussed at length in the previous section, there is still another issue that is equally interesting to note: the semantic overlap between these categories, which gives rise to a great deal of indeterminacy. Clauses such as *I think*, *I reckon*, *I suppose* have come to serve not only as projecting clauses in clause complexes but also as interpersonal Adjuncts of modality within the projected clause (cf. Halliday, 1985/1994; Matthiessen, 1991).

First, let's consider the only instance of *but I think* which can be arguably classified as the first category of *I think*. See example (19) below. As mentioned, the first category of *I think* preceded by *but* is used to introduce a clause that expresses the writer's personal view, which constitutes a contrast to the view held by a third person conveyed in the preceding clause.

(19) Hamel believes Neaira began prostitution at twelve or thirteen, but I think she may have been younger as Nikarete would have wanted the girls earning as soon as they reached puberty. (BAWE-E)

Here, the sequence is realized by two projecting clauses of equal status, i.e. *Hamel believes* and *I think* which function to introduce ideas attributed to different Subjects of the main clauses, namely *Hamel* and *I* (See Figure 9 below). The two Subjects and the ideas attributed to them are presented as two contrasting pairs. Hamel's belief and the writer's view concerning when Neaira began prostitution are contrasted and compared in the way that neither is given more prominence. The type of logicosemantic relation encoded by *but* in (19) corresponds to the adversative type of extension.

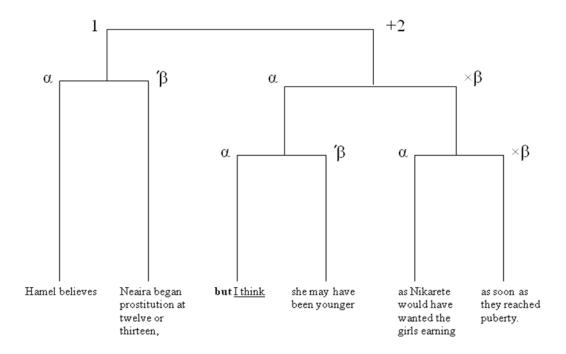


Figure 5.9 Analysis of example (19) as paratactic adversative subtype of extension

At the same time, it is worth noting that the adversative sense of *but* in (19) also borders on the internal concessive relation meaning 'I concede that X, but I still hold that Y' (Matthiessen, 2002). See Figure 10 below for the analysis of (19) as paratactic concessive enhancement. With concessive interpretation, the writer's view conveyed by the *but*-clause is given more prominence. One piece of evidence is that the *but*-clause in (19) which represents the writer's view is enhanced by a hypotactic *as*-clause (i.e. *as Nikarete would have wanted the girls earning as soon as they reached puberty*) indicating reason. Under this interpretation of *but*, as illustrated by Figure 5.10 below, *I think* functions a modal Adjunct within the modalized clause.

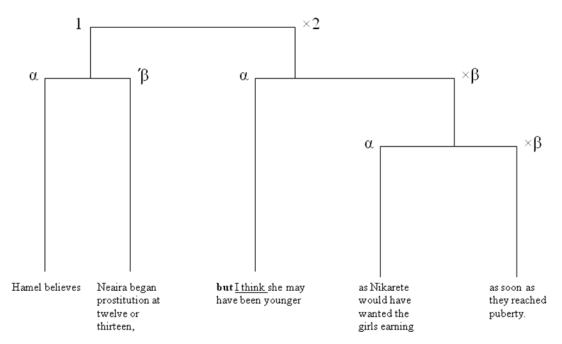


Figure 5.10 Analysis of example (19) as paratactic concessive subtype of enhancement

In addition to the explicit subjective *I think*, the probability of the proposition of the *but*-clause is further reinforced by the modal operator *may*, which denotes implicit subjective type of modality. Being a finite modal operator, the syntactic position of *may* is fixed. In comparison, the metaphorical Adjunct of modality *I think* can occur in a variety of positions within the modalized clause (notably the final position), as illustrated by (19a) below.

(19a) Hamel believes Neaira began prostitution at twelve or thirteen, **but** she may have been younger, <u>I think</u>, as Nikarete would have wanted the girls earning as soon as they reached puberty.

Removed from the initial position, *I think* in (19a) no longer serves as interpersonal Theme of the clause. The final position *I think* seems to border on comment Adjunct or comment clause in Biber et al.'s (1999) classification. However, it is worth pointing out that initial or thematic position *I think* seems to be more common, partly because it is in origin a projecting clause, and partly because interpersonal Adjuncts

are commonly found in thematic position of a clause.

The two alternative interpretations of (19) discussed above can be seen as a reflection of the fundamental principle of natural language: 'systemic indeterminacy' (Halliday & Matthiessen, 1999).

However, it is difficult to argue for alternative interpretations of the remaining instances of *but I think* in BAWE-E. These instances are characterized by the status of *I think* as an interpersonal Adjunct of modality. An example is given in (20) below.

(20) There are many ways of defining hospitality, **but** <u>I</u> think Lashley's definition is best. (BAWE-E)

Here, *I think* serves as a metaphorical Adjunct of modality and hence is agnate with the congruent forms of modality such as *probably* and *may*. The conjunction *but* is unambiguous of paratactic concession. The concessive sense encoded by *but* in (20) is to be interpreted externally in the sense of 'frustrated cause' (Matthiessen, 2002). If the agnate structures associated with *but* and *I think* are taken into account at the same time, example (20) can be paraphrased as:

(20a) **Although** there are many ways of defining hospitality, Lashley's definition is probably the best.

As illustrated by (20a), such agnate structures typically hold for cases of *I think* as an interpersonal Adjunct of modality co-occurring with *but* used as a maker of concession.

#### **5.4 Summary**

What has been exemplified in this chapter shows that the co-occurrence patterns of

but can shed light on the types of logico-semantic relations it encodes. Two frequent co-occurrence patterns, namely but in fact and but I think in CLEC and BAWE-E have been discussed. While the functions of but I think seem to be consistent across the corpora, the uses of but in fact by two groups of writers differ significantly with respect to both syntactic and semantic patterns.

Syntactically, while Chinese EFL learners' use of *but in fact* is characterized by sentence-initial *but*, native speaker writers' use of *but in fact* is more frequently associated with *but* used within the clause complex. With respect to semantic relations, *but in fact* in Chinese EFL learners' writing has a strong tendency to express the adversative relation, whereas instances of *but in fact* in native speakers' writing are more likely to signal the replacive relation. The two types of semantic relations are also found to be associated with different lexico-grammatical features. For instance, subject ellipsis and negative polarity are two distinguishing features of paratactic replacive relation signaled by *but* co-occurring with *in fact* in native speakers' writing. By contrast, Chinese EFL learners' use of *but in fact* tends to be associated with a preceding clause complex that denotes mental processes with verbs such as *think* and *believe*, etc. These verbs function to express non-factual state of affairs in contrast to real facts conveyed by the *but*-clause.

With respect to *but I think*, it is interesting to note that both Chinese EFL learners and their native-speaker counterparts use *I think* as an interpersonal Adjunct of modality proportionally more than its use as a projecting clause. While the interpersonal Adjunct type of *I think* is associated with the concessive sense of *but*, projecting clause *I think* is closely interconnected with the adversative sense of *but*. On the other hand, the functional categories of both *I think* and *but* frequently shade into one another thereby giving rise to a great deal of indeterminacy. In borderline cases, agnate structures are explored, but no effort is made to impose any definite categories.

# Chapter 6 The Positioning of while-clauses and the Implications for Understanding the Types of Logico-semantic Relations of while across the Corpora

In view of the multivalent status of *while* as a marker of adversative, concessive and temporal relations (Halliday & Matthiessen, 2004), this chapter aims to explore the interconnections between the types of logico-semantic relations encoded by *while* and the positions of *while*-clauses in hypotactic nexuses. Section 6.1 explores the various sequences of *while*-clause and the associated main clause in a hypotactic nexus in CLEC and BAWE-E. In particular, effort is made to compare and contrast two textually distinct syntactic patterns of *while*-clauses, namely conjunctive Adjunct + *while*-clauses and *that-while*-clauses in BAWE-E. Note that these patterns are absent in CLEC. Section 6.2 compares initial and final *while*-clauses for different meanings across the two corpora. Section 6.3 explores the differences between initial and final *while*-clauses further, by considering the lexicogrammatical environment of *while* across the corpora. Specifically, the pattern of *while* ... *may* is explored to shed light on the distinctions between concessive and adversative meanings of *while* on the one hand and initial and final *while*-clauses on the other.

#### 6.1 Sequences of while-clause and the main clause in a hypotactic nexus

As mentioned in Chapter 4, Section 4.1.1, hypotactic conjunctions including *although*, *though*, *while* and *whereas* can introduce either initial or final hypotactic clauses. Medial position or enclosed hypotactic clauses are less frequent and will be discussed later in this section. Initial hypotactic clauses are associated with regressive sequence ( $\beta \land \alpha$ ), whereas final hypotactic clauses are associated progressive sequence ( $\alpha \land \beta$ ) (Halliday & Matthiessen, 2004). Examples of initial and final *while*-clauses from BAWE-E and CLEC are given below.

- (1) While he should see through her lies, he is too delighted and overwhelmed with his wife's pretended display of affection to question her honesty. (BAWE-E)
- (2) *While* he was in prison, he wrote a book that made him adored by many people. (CLEC)
- (3) The First War essentially focused on the area around Sicily, while the Second Punic War had theatres of war in Spain, (later Africa) and Italy. (BAWE-E)
- (4) Moreover, infant mortaility [fm1,-] in developing countries was 20% in 1960, while it decreased to 10% in 1990. (CLEC)

These examples seem to suggest that initial *while*-clauses, as in (1) and (2) and final *while*-clauses, as in (3) and (4) can be distinguished on their distinct orthographic patterns. That is, an initial *while*-clause is characterized by an initial capital (While Y, X.), whereas a final *while*-clause is characterized by an initial lowercase (X, while Y.). Admittedly, orthographical patterns alone cannot serve as reliable criteria for distinguishing these sequences. However, the initial concordancing search has to be confined to these patterns.

Based on the orthographic patterns illustrated above, the distribution of sentence-initial and non sentence-initial *while* across the corpora is presented in Table 6.1 below. Note that the term 'sentence-initial' and 'non sentence-initial' refer to orthographic patterns of the conjunction. Indeed, 'sentence', in SFL terms, refers only to graphological unit of grammar (Halliday & Matthiessen, 2004). At the strata of lexicogrammar, structural conjunctions including *while* are fixed at the initial position of the clause, and hence are inherently thematic.

Table 6.1 Positional distribution of while across the corpora

	CLEC		BAWE-E		
while	N/million	%	N/million	%	
Non sentence-initial	408.2	75.6%	380.4	65.3%	
Sentence-initial	131.6	24.4%	201.7	34.6%	
TOTAL	539.8	100%	582.1	100%	

As shown in Table 6.1, non sentence-initial position is more frequent in both corpora, indicating Chinese EFL learners and native-speaker writers' preference for progressive sequence ( $\alpha \wedge \beta$ ). However, as indicated, when orthographic words are used to search for a semantic category, the search results may involve instances that do not fit into the predefined semantic category. A close examination of the concordance lines of *while* reveals that while instances of sentence-initial *while* correspond to regressive sequence ( $\beta \wedge \alpha$ ) in both corpora, non sentence-initial *while* in BAWE-E involve complex syntactic patterns and not all of them can be classified into progressive sequence ( $\alpha \wedge \beta$ ). In other words, apart from being preceded by the associated main clause, *while*-clause can be preceded by other elements or clauses. As mentioned in Chapter 4, Section 4.5.1, these patterns can be identified by exploring the co-occurrence patterns of non-sentence initial *while*. See Table 6.2 below.

Table 6.2 Top five co-occurring words of while in L1 position in BAWE-E

L1	N
that	97
however	25
and	22
thus	12
therefore	11

As can be seen from Table 6.2 and as mentioned in Chapter 4, Section 4.5.1, these words co-occurring with *while* in L1 position are associated with three major syntactic patterns: i) *that* + *while*-clause + main clause; ii) *and* + *while*-clause + main clause; iii) conjunctive Adjunct + *while*-clause. Examples of these patterns are given below.

- (5) Basu (1995:1) argues that while women's movements share certain commonalities, they differ along many dimensions. (BAWE-E)
- (6) Each model draws on and attempts to better previous studies, <u>and</u> while they are all useful for identifying general trends, there are significant flaws in them which limit their usefulness. (BAWE-E)
- (7) <u>However</u>, while PACE provides an impressive list of safeguards and limitations, it

The first two syntactic patterns, exemplified by (5) and (6) are similar in that they all represent regressive sequence ( $\beta \wedge \alpha$ ) with internal 'nesting' or 'bracketing' (Halliday & Matthiessen, 2004). Specifically, the pattern *that* + *while*-clause + main clause, exemplified by (5), can be represented as  $\alpha \wedge \beta$  ( $\beta \wedge \alpha$ ), where *while*-clause and the associated main clause following regressive sequence ( $\beta \wedge \alpha$ ) serves as hypotactic ( $\beta$ ) clause introduced by *that*. The pattern *and* + *while*-clause + main clause, as in (6), can be represented as  $1 \wedge 2$  ( $\beta \wedge \alpha$ ), in which the hypotactic nexus of regressive sequence ( $\beta \wedge \alpha$ ) functions as the continuing clause, namely 2 of a paratactic sequence introduced by *and*. It is worth pointing out that in addition to *that* and *and*, *while*-clause can be preceded by other conjunctions such as *for* (10 instances), *because* (6 instances) and *but* (3 instances) thereby forming similar regressive sequences ( $\beta \wedge \alpha$ ) with internal nesting. Given the high-frequency of *that-while*-clause + main clause, this pattern will be further explored in section 6.1.2.

The pattern of conjunctive Adjunct + while-clause, as exemplified by (7) above, represents a different sequence from both initial while-clause ( $\beta \wedge \alpha$ ) and final while-clause ( $\alpha \wedge \beta$ ). According to Halliday and Matthiessen (2004), this pattern can be represented as  $\alpha \ll \beta \gg$ , in which while-clause is enclosed in the main clause introduced by an initial conjunctive Adjunct. Under this interpretation, the initial conjunctive Adjunct such as however and thus is seen as an element of the main clause rather than the whole hypotactic nexus consisting of both main clause and the initial while-clause. This idea will be further explored in Section 6.1.1.

Since these patterns of non sentence-initial *while* are seldom used in CLEC, the figures for sentence-initial and non sentence-initial *while* in CLEC presented in Table 1 above can be interpreted as the distribution of initial and final *while*-clauses in the learner corpus.

In view of the fact that non sentence-initial *while* in BAWE-E involve not only progressive sequence  $(\alpha \land \beta)$ , but also regressive sequence  $(\beta \land \alpha)$  and enclosed *while*-clauses  $\alpha << \beta >>$ , the preference for progressive sequence  $(\alpha \land \beta)$  is less prominent in BAWE-E than was expected from Table 1. See Table 6.3 below for the distribution of *while*-clauses in CLEC and BAWE-E.

Table 6.3 Distribution of while-clauses in CLEC and BAWE-E

	CLEC		BAWE-E	
	N/million	%	N/million	%
(α ^ β)	408.2	75.6%	314.7	54.1%
(β ^ α)	131.6	24.4%	244.7	42.0%
α << β >>	-	-	22.7	3.9%
TOTAL	539.8	100%	582.1	100%

As seen from Table 3, progressive sequence ( $\alpha \wedge \beta$ ) is more frequent than regressive sequence ( $\beta \wedge \alpha$ ) in both corpora. However, the trend is more pronounced in CLEC (75.6% vs. 24.4%) than BAWE-E (54.1% vs. 42.0%). In other words, initial *while*-clause ( $\beta \wedge \alpha$ ) is two times more frequent in BAWE-E than CLEC. A close examination of the concordance lines seems to suggest that the distribution of initial and final *while*-clauses across the corpora is closely interconnected with the distribution of the types of logico-semantic relations encoded by *while*. The interconnections will be explored in Section 6.3.

Note that the figures given for enclosed *while*-clause, namely  $\alpha << \beta >>$  are derived from the frequency of initial conjunctive Adjuncts preceding *while*, which will be explored further in Section 6.1.1. Admittedly, in addition to conjunctive Adjuncts serving as textual Themes, initial interpersonal Themes preceding *while*-clauses also give rise to enclosed structure. An example is given in (8) below. However, due to the low frequency of this pattern, i.e. Interpersonal Theme + *while*-clause, it is not included in the frequency counts of embedded *while*-clauses.

(8) According to Abuza, while Megawati was being pushed alike by the parliamentary leaders and terrorist groups like Laskar Jihad, to take a stringer stance against the US, other moderate Islamic organizations like the Nahdlatul Ulama (NU) and Muhammadiyah were rather supportive of the war. (BAWE-E)

### 6.1.1 Conjunctive Adjuncts+ while-clauses

This section discusses cases where *while*-clauses are preceded by initial conjunctive Adjuncts such as *however*, *therefore*, and *moreover*, etc. The distribution of the conjunctive Adjuncts preceding *while* in L1 position in BAWE-E is set out in Table 6.4 below.

Table 6.4 Distribution of conjunctive Adjuncts preceding while in L1 position in BAWE-E

Conjunctive Adjunct+ while	N
However	25
Thus	12
Therefore	11
For example	8
Moreover	8
Yet	5
Hence	4
TOTAL	73

As shown in Table 6.4, overall, BAWE-E yields 73 instances of this pattern. The conjunctive Adjuncts in this pattern come from a variety of semantic categories including additive (e.g. *moreover*), exemplifying (e.g. *for example*), result (e.g. *thus*, *therefore*, and *hence*) and adversative/concessive (e.g. *however* and *yet*). Among these categories, conjunctive Adjuncts of adversative/concessive occur most frequently, followed by those of result. Before discussing the two categories of conjunctive Adjuncts in the pattern of conjunctive Adjunct + *while*-clause in more detail, some basic properties of this pattern are outlined below.

The first observation that could be made about this pattern is that conjunctive Adjuncts and while differ with respect to the scope they cover. As mentioned in Chapter 2, conjunctive Adjuncts in initial position function as textual Themes—they set up a contextualizing relationship with some other (typically preceding) portion of text (Halliday & Matthiessen, 2004, p. 132). In the case of conjunctive Adjunct + while-clause + main clause, the initial conjunctive Adjunct provides a context for the main clause by relating backward to the preceding text. Conjunctive Adjuncts (adverbials) in initial position have an anaphoric function (Quirk et al., 1985). In contrast, the conjunction while follows the linear sequence of the hypotactic nexus and forms a forward-connecting link with the subsequent main clause. Within the domain of the hypotactic nexus, while-clause represents Theme, providing contextualization for the subsequent main clause. Thus, the pattern conjunctive Adjunct + while-clause sets up two distinct levels of linking: i) the backwardconnecting cohesive link; and ii) the forward-connecting hypotactic structural link. The interrelationship between the two types of links can be captured in a tree diagram illustrated in Figure 6.1 below.

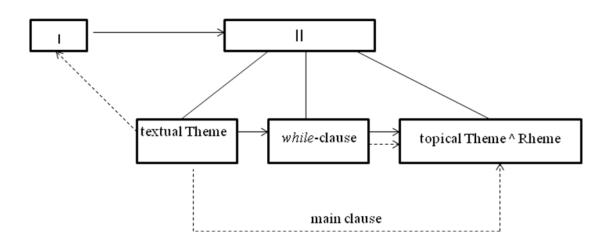


Figure 6.1 Structural and cohesive relations in *while*-clause preceded by a conjunctive Adjunct

As can be seen from Figure 6.1 above, one clause complex is insufficient to illustrate the cohesive link signaled by the initial conjunctive Adjunct. Two clause complexes,

i.e. I and II which represent the clause complex immediately before the conjunctive Adjunct and the one containing the conjunctive Adjunct, respectively, are illustrated in Figure 6.1. The leftwards arrows symbolize the linear sequence of the clauses and clause complexes as they appear in the text. The dashed arrows symbolize the directions of the semantic relations encoded by the initial conjunctive Adjunct and while. The relations marked by the initial conjunctive Adjunct and while differ in hierarchy (seen Figure 6.1). Due to the differences in hierarchy, these two types of relations develop the arguments in a step-by-step manner. The cohesive link between I and II signaled by the initial conjunctive Adjunct represents the first level of the relation, whereas the structural link between the initial while-clause and the subsequent main clause represents the secondary level of the relation. However, as discussed above, due to the insertion of the while-clause as a secondary link, the first link is interrupted and is complete only after the subsequent main clause following while-clause. For this reason, while-clause preceded by an initial conjunctive Adjunct is interpreted as enclosed in the main clause (Halliday & Matthiessen, 2004). In other words, the initial conjunctive Adjunct serves as textual Theme of the main clause and is loosely connected with while-clause. As suggested by Halliday and Matthiessen (2004, p. 372), the motivation behind this sequence is to provide the main clause with three types of contextualization: first by the initial conjunctive Adjunct as textual Theme, and then, within the domain of the clause complex, by the dependent clause that qualifies it, and finally by its own topical Theme.

In addition to the differences with respect to the scope of initial conjunctive Adjuncts and *while*, a close examination of the instances of this pattern in BAWE-E further reveals that conjunctive Adjuncts and *while* also differ with respect to the types of semantic relations they encode. It is found that the conjunction *while* in this pattern is used to express only one type of logico-semantic relation, namely the concessive type of enhancement, whereas conjunctive Adjuncts coming from a variety of semantic categories are used to mark different types of semantic relations.

Having described the syntactic and semantic features of this pattern in general, it is now necessary to examine how these features can be applied to analyzing examples from the corpus. As mentioned above, conjunctive Adjuncts preceding *while*-clause express semantic relations by referring to the preceding text. The preceding text is thus quoted as an integral part of the examples of this pattern discussed below.

Example (9) below is an instance of "*However* + *while*-clause" which represents the most frequent (25 occurrences) pattern of conjunctive Adjunct + *while*-clause in BAWE-E.

(9) Indeed there were many important differences in the society, economy and other areas of Northern and Southern life, the presence of an enslaved labour force in one being the most glaringly obvious. <u>However</u>, while these may have taken on a greater importance after the commencement of the war, at this point in time I would argue that the similarities between the sections are of equal importance to the historian who desires to examine this period as a unique time in its own right. (BAWE-E)

I	=β		Indeed there were many important differences in the society, economy and other areas of Northern and Southern life,
			the presence of an enslaved labour force in one being the most glaringly obvious.
II	×β		<b>However</b> , while these may have taken on a greater importance after the commencement of the war,
	α	α	at this point in time I would argue
		"β	that the similarities between the sections are of equal importance to the historian [[who desires to examine this period as a unique time in its own right]].

Figure 6.2 Analysis of example (9)

In (9), the initial *however* in II serves as textual Theme. It functions to mark concession between the main clause of II which is a hypotactic nexus of projection and the preceding text, namely, I.

Note that the projecting clause I would argue could be arguably interpreted as an interpersonal metaphor for expressing explicit subjective modality. See Chapter 5, Section 4 for the description of the metaphorical use of *I think* co-occurring with but as an Adjunct of modality. However, the complementizer that seems to suggest that the interpretation of I would argue as a projecting clause is more plausible. The concession signaled by the initial however is interrupted by an enclosed while-clause, while these may have taken on a greater importance after the commencement of the war, which does not contradict but partially repeats what is said in I. The partial repetition is first conveyed by the topical Theme of while-clause, i.e. these, which refers back to what is mentioned in I. Specifically, it refers to many important differences in the society, economy and other areas of Northern and Southern life, the presence of an enslaved labour force. Then, immediately following the topical Theme, the Rheme of while-clause, namely may have taken on a greater importance is a repetition of many important differences in I. The Rheme of while-clause is then contrasted with what is expressed in the main clause of II emphasizing the importance of the similarities between the sections. Note that the circumstantial Adjunct at this point in time is selected as the marked topical Theme of the main clause of II so that it is given a special adversative emphasis with the corresponding element, i.e. after the commencement of the war in while-clause.

In view of the function of *while*-clause in (9) to convey information already given in the preceding text, dropping *while*-clause will not cause any significant changes in meaning. In other words, being enclosed, *while*-clause is less central both with regard to clause structure and the communicative purpose. The writer of (9) could express the concessive relation between I and II without *while*-clause, as illustrated by (9a)

below.

(9a) Indeed there were many important differences in the society, economy and other areas of Northern and Southern life, the presence of an enslaved labour force in one being the most glaringly obvious. <u>However</u>, at this point in time I would argue that the similarities between the sections are of equal importance to the historian who desires to examine this period as a unique time in its own right.

The concessive relation conveyed by (9a) is basically the same as (9). The initial however indicates that the propositional content of the clause is contrary to expectation given what has been expressed in the preceding text. That is, despite what is conveyed by the preceding clause complex about the many important differences, it is the opposite — the similarities — that the writer intends to focus on, as highlighted by I would argue. However, it is interesting to note that without the enclosed while-clause, the initial circumstantial Adjunct of time at this point in time which represents a marked topical Theme seems to be less motivated. As discussed earlier, the initial circumstantial Adjunct at this point in time is thematized in (9) for purposes of contrast with the circumstantial Adjunct after the commencement of the war in the final part of the preceding while-clause.

However, while it is possible to drop *while*-clause in (9), placing *while*-clause after the main clause would be highly marked. Compare:

(9b) Indeed there were many important differences in the society, economy and other areas of Northern and Southern life, the presence of an enslaved labour force in one being the most glaringly obvious. <u>However</u>, at this point in time I would argue that the similarities between the sections are of equal importance to the historian who desires to examine this period as a unique time in its own right, **while** these may have taken on a greater importance after the commencement of the war.

As can be seen from the discussion of (9a), without *while*-clause, the concessive relation signaled by the initial conjunctive Adjunct *however* is already complete. Placing *while*-clause which represents given information after the main clause is a highly marked sequence of information structure. Given information which is recoverable from the context is typically given thematic status (Halliday & Matthiessen, 2004). Furthermore, the presence of the anaphoric device *these* in *while*-clause makes it difficult to place *while*-clause in final position, as indicated by the awkwardness of (9b). In (9b), it is difficult to establish a similar anaphoric link between *these*, which is the topical Theme of final position *while*-clause and the propositional contents of the preceding clause complex.

As mentioned earlier in this section, conjunctive Adjuncts expressing result also occur frequently before *while*. Example (10) below illustrates the pattern in which *while*-clause is preceded by an initial conjunctive Adjunct of result. In light of the backward-connecting function of the initial conjunctive Adjunct, the preceding text is quoted as part of the example to be analyzed.

(10) While the question above seems to be fairly straightforward, it is in this writer's opinion that the position one takes in the fore-mentioned debate has bearings on how one would view the nature of Winstanley's religious outlook in The New Law of Righteousness (1649). Therefore, while an examination of the primary sources is necessary, it is equally important to consider the interpretations of some historians on Winstanley, and, as far as possible, how their biases feature in the following themes: the nature of Winstanley's millenarianism; his conception of God; his understanding of the Fall and Restoration; and finally his views on the institutionalized church. (BAWE-E)

The initial conjunctive Adjunct therefore in (10) introduces a proposition representing

the result of something mentioned in the preceding text, which is also quoted as part of the example. Interestingly, the clause complex immediately before therefore is another instance of while-clause nexus. The causal relation signaled by the conjunctive Adjunct therefore represents the first link which is determined not by what immediately comes after it in while-clause, but by the subsequent main clause. In other words, the causal relation is interrupted by an enclosed while-clause which expresses the secondary structural link, i.e. a hypotactic concession. The propositional content of the main clause which emphasizes the equal importance to consider interpretations of some historians is surprising given the context of the enclosed while-clause, which acknowledges the need for an examination of the primary sources. The topical Theme of while-clause, namely an examination of the primary sources refers to examination of The New Law of Righteousness (1649) mentioned in the preceding clause complex. In this way, the enclosed while-clause represents information which is partially recoverable from the preceding text. In comparison, the propositional content conveyed by the subsequent main clause is less accessible to the reader. The sequence of while-clause and main clause in (10) is thus motivated by the need to present Given information before New information. In addition to information structural considerations, the relative length of while-clause and the main clause also makes it highly marked to place the lengthy main clause before the short while-clause. Compare:

(10a) While the question above seems to be fairly straightforward, it is in this writer's opinion that the position one takes in the fore-mentioned debate has bearings on how one would view the nature of Winstanley's religious outlook in The New Law of Righteousness (1649). Therefore, it is equally important to consider the interpretations of some historians on Winstanley, and, as far as possible, how their biases feature in the following themes: the nature of Winstanley's millenarianism; his conception of God; his understanding of the Fall and Restoration; and finally his views on the institutionalized church, while an examination of the primary sources is

necessary. (BAWE-E)

As can be noted from the examples discussed above and from the comparisons made between alternative sequences associated with these examples, the sequence of while-clause and the associated main clause is restricted by the textual environment of while-clause. That is, when while-clause is preceded by an initial conjunctive Adjunct, while-clause becomes enclosed in the main clause. While it is possible to drop the enclosed while-clause, it would be highly marked to place while-clause after the main clause. The analysis also reveals that the enclosed while-clause is typically used to encode the concessive type of enhancement, while the initial conjunctive Adjunct may signal a variety of semantic relations, concessive and result being the most frequent ones.

### 6.1.2 that-while-clauses

As mentioned in Section 6.1, *that* represents the most frequent word co-occurring with *while* in L1 position in BAWE-E. Overall, there are 97 instances of *that-while*-clauses in BAWE-E. The first 20 concordances lines are presented in Figure 6.3 below.

#### Ν Concordance 1 duty. Moreover, it has been pointed out that while Blackburne J rejected 2 in 'The Moral Career of a Research Project' that while conducting the research, many of 3 and sexism. Sharon Angella Allard notes that while this theory might explain the 4 examines Booth's concluding observations, that while politics shall always, in as sense, 5 at severe risk of exploitation. He questions that while confidentiality may be in 6 mind and body distinction. Firstly, he remarks that while the body is divisible, the mind is 7 Malcolm X. It is important to remember that while the Civil Rights Movement had 8 social progress, there is a realization that while the luxury debates are becoming 9 of sex and gender was based on the reasoning that while sex is the unalterable biological 10 between Diodorus and Thucydides, however, is that while Diodorus' style is in accordance 11 separately (see Figure 5). Noteworthy is that while deposits start growing after July 12 and one comparison that could be drawn is that while Carrera was cruel, he lacked the 13 is also essentially just a belief. The problem is that while we might believe that a certain act 14 arguments for it. The basis of the argument is that while the capital punishment system is 15 in CD consumption (from X to X). This means that while CD's are normal goods for 16 , taken-for-granted principles, which means that while they are perfectly correct given 17 autobiography, p.2) and "it had dawned on me, that while it may be comfortable and easy, it 18 often being 'traded' in for others. This means that while women seize upon one right, they 19 lines 12-13, 17-18, 21-22 we can clearly see that while the one participant is talking the 20 launches a scathing attack, again stressing that while the Aztec world lacked grazing

Figure 6.3 Concordance lines of that while from BAWE-E

As can be seen from Figure 6.3 above, based on the function of *that*-clause in a clause complex, *that-while*-clauses can be further classified into two major sub-patterns: i) hypotactic projection; ii) embedded projection of fact. While absent in CLEC, the two sub-patterns are more or less evenly distributed in BAWE-E. In either case, *while*-clause and the associated main clause follows regressive sequence ( $\beta \land \alpha$ ). The former is exemplified by Concordance No. 3, 4, 5, 6, 17 and 20, whereas the latter is exemplified by the remaining concordance lines in Figure 6.3. In the discussion below, I will illustrate their distinct functions with examples from the corpus.

The first sub-pattern, namely, hypotactic projection is characterized by a set of verbs before *that*. These verbs are associated with verbal processes (e.g. *argue*, *note*, *imply*, *suggest*, *indicate*, *emphasize*, etc.), with the verb *argue* occurring the most frequently

```
Ν
    Concordance
1
           of the Early Middle Ages" 1965)Effros argues that while mortuary deposits
2
         the decline of social class. However he argues that while the divisions of class
3
             the use of closed questions. Brown argues that while this technique is an
4
       movement is multifaceted. Basu (1995:1) argues that while women's movements
5
       ideas of the Third Way. Firstly, Hobhouse argues that while economic competition
6
        were all from marginal groups. North has argued that while we cannot be sure of
7
               of consumptive wildlife utilisation argue that while wildlife is generally
8
           childbirth. In conclusion then, I would argue that while social control has
9
            definition of charisma one could also argue that while some individuals who
10
        or 'the clash of cultures.' One could thus argue that while charisma is undoubtedly
```

Figure 6.4 Concordance lines of argues that while from BAWE-E

As can be seen from Figure 6.4 above, the subject associated with the verb argue denotes a person, realized either by pronouns (Concordances No.2, 8, 9, 10) or proper nouns (Concordances No. 1, 3, 4, 5 and 6). The human subject plus the verb argue constitutes the projecting clause, whereas that-clause represents the content of the projection, i.e. projected clause. The projected clause is a hypotactic nexus involving while-clause and the main clause. Thus, the pattern "X argues that while" involves a combination of hypotactic projection and hypotactic enhancement. The function of the main clause "X argues" is best understood in terms of the writer's need to quote and report from other people. It is occasionally used to express personal views, I argue, as in concordance No 8. However, as mentioned in Section 6.1.1, I argue that already borders on the metaphorical Adjunct of modality. As suggested by Halliday and Matthiessen (2004), verbal projection plays an important role in academic discourse, making it possible to quote and report from various scholars while at the same time indicating the writer's stance with verbs like point out, suggest, claim and assert. Note that the projected clauses introduced by that are called complement clauses in traditional grammar. Complement clauses occurring in post-predicate position are commonly used to report the speech, thoughts, attitudes, or emotions of humans (Biber et. al., 1999). However, that-clauses in Figure 4 above are not

interpreted as complement clauses by Halliday and Matthiessen (2004). The reason, as they suggest is that what is said, i.e. the projected clause, does not function as direct representation of (non-linguistic) experience but as a representation of a (linguistic) representation (p. 441).

To further explore the pattern 'X *argues that-while*-clause + main clause', one of the concordance lines in Figure 4, i.e. concordance No. 3 is expanded to show the full-context of the clause complex.

(11) Brown argues that while this technique is an efficient way of gathering data, it may promote misunderstanding and, crucially, does little to establish a rapport.

(BAWE-E)

Example (11) is analyzed in Figure 6.5 below.

α		Brown argues	
"β	×β	that while this technique is an efficient way of gathering data,	
	α1	it may promote misunderstanding	
	α+2	and, crucially, does little to establish a rapport.	

Figure 6.5 Analysis of example (11)

As can be seen from Figure 6.5, while-clause and the associated main clause follow regressive sequence ( $\beta$  ^ a), which taken together serves as the projected clause, i.e. " $\beta$ . The projected clause functions to specify the content of the preceding projecting main clause, namely *Brown argues*. Specifically, while-clause provides the positive evaluation of this technique, which is the Subject of the clause, whereas the subsequent main clause conveys the negative evaluation of the same Subject. The positive evaluation is conceded, whereas the negative evaluation is highlighted. The overall evaluation of this technique conveyed by the hypotactic nexus is negative. However, by using a projecting clause, *Brown argues*, the negative evaluation is not expressed from the writer's point of view but attributed to a third person, i.e. *Brown*. Therefore, the pattern "X argues that-while-clause" as exemplified by (11) differs

from initial *while*-clause in that the latter does not convey attributed evaluation. Compare:

(11a) While this technique is an efficient way of gathering data, it may promote misunderstanding and, crucially, does little to establish a rapport.

Here, without projecting clause, the evaluation seems to be attributed to the writer. The meaning conveyed by (11a) is thus very different from (11).

To further illustrate the textual transitions between the interrelated clauses and the textual status of elements of clauses in example (11), a graphic representation of these links is show in Figure 6.6 below.

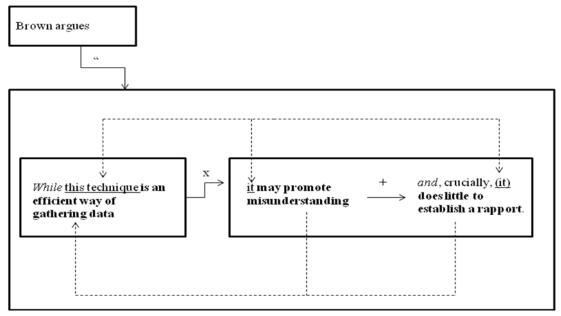


Figure 6.6 Diagrammatical representation of the structural and semantic links of example (11)

Here, the rightwards arrows connecting the boxes represent the linear sequence of the clause complex, whereas the dashed arrows symbolize the semantic relations between elements. At the syntactic level, the hierarchy is indicated by the positioning of the boxes and the zigzag arrows connecting them. The box on the top symbolizes the

projecting clause, i.e. *Brown argues* and the lower box symbolizes the projected *that*-clause. The top box is connected to the lower one with a downwards zigzag arrow indicating the hypotactic status of the projected clause. Within the projected clause, the initial *while*-clause is connected to the subsequent clause with a rightwards zigzag arrow indicating that the subsequent clause is the main clause. The linear sequence of the clause complex marking textual transitions between clauses is also marked with the type of expansion or projection (" = projection of locution; × = enhancement; + = extension).

Semantically, in order to illustrate the concessive relation marked by while, each clause within the hypotactic nexus is analyzed in terms of its thematic structure. As can be seen in Figure 6 (textual Themes in italic, topical Themes underlined and Rhemes in bold), by dividing each clause into the textual components of Theme and Rheme, the contrast is easily shown with the leftwards dashed arrows pointing from Rhemes of the main clause to that of while-clause. Note that the main clause is by itself is a paratactic nexus consisting of two paratactic clauses. The lexical items realizing the Rhemes of the two paratactically linked clauses are in direct contrast with that of the initial while-clause. As discussed above, the contrast is best captured from the perspective of the positive and negative semantic value of the Rhemes: both may promote misunderstanding and crucially does little to establish a rapport convey a highly negative evaluation, whereas an efficient way of gathering data is clearly positive. Apart from the contrast between Rhemes, the equivalence of topical Themes is also indispensable to the concessive relation signaled by while in example (11). As illustrated by the two-way dashed arrows in Figure 6, the topical Themes of the initial while-clause and those of the main clause are co-referential.

The thematization of somebody other than the author as a source is the main function of the first sub-pattern of *that-while-*clauses. A pattern of agnation typically holds between the projecting clause and circumstantial Adjunct such as *according to*.

### Compare:

(11b) According to Brown, while this technique is an efficient way of gathering data, it may promote misunderstanding and, crucially, does little to establish a rapport.

The second sub-pattern of *that-while*-clause is associated with the function of *that*-clause to introduce embedded projection of fact. The relevance of this pattern with regard to the function of initial *while*-clause is discussed below.

Halliday and Matthiessen (2004, p. 472) note that when there is no participant doing the projection, a fact may be projected impersonally, either by a relational process ('it is clear that...') or by an impersonal mental or verbal process. An example of this type of *that*-clause containing *while*-clause is given below.

(12) It would seem that while the need for labour was certainly a crucial factor in guiding the direction of debasement, its role was a supporting one. (BAWE-E)

Here, it would seem that is projection of fact in the form of a mental process in the transitivity system (Halliday & Matthiessen, 2004). The Subject it does not serve as a participant in the projecting clause but is a "Subject placeholder" (p. 472). The embedded that-clause functions as post-posed Subject and hence can be pre-posed: that while the need for labour was certainly a crucial factor in guiding the direction of debasement, its role was a supporting one would seem to be the case. The finite would and the predicate seem suggest a degree of possibility which is not explicitly attributed to the author. In this sense, embedded that-clause differs from the hypotactic projecting that-clause discussed earlier in that the latter attributes the source of attitude or stance conveyed in that-clause to a particular person, whereas the former does not and is thus more objective. Halliday and Matthiessen (2004, p. 615) uses the term 'explicit objective interpersonal metaphor' for the post-posed embedded

subject clause, thereby emphasizing that its main discourse function is to convey a sense of probability while making it seem objective. The construction is used in order to avoid mentioning the writer and is more or less a substitute for *I think* which attributes the attitude to the writers explicitly (See Chapter 5, Section 5.2). Similarly, Biber et. al. (1999, p. 661) argue that the extra-posed (post-posed) *that*-clause involves a main clause that often reports an attitude or stance which is not overtly attributed to any one person. They further note that this is usually the attitude of the writer of the text, even though the author does not assume explicit responsibility for the attitude. Compare:

(12a) I think while the need for labour was certainly a crucial factor in guiding the direction of debasement, its role was a supporting one.

(12b) In my opinion, while the need for labour was certainly a crucial factor in guiding the direction of debasement, its role was a supporting one.

Note that while both *I think* and *in my opinion* serves as interpersonal Themes, the sequence of *while*-clause and the main clause in (12a) and (12b) is thus  $\alpha <<\beta>>$ , similar to the pattern of conjunctive Adjunct + *while*-clause discussed in Section 6.1.1.

It is interesting to note that *it would seem that* ... in example (12) is treated as a clause with embedded structure by Halliday and Matthiessen (2004), whereas in more traditional accounts (e.g. Biber et al., 1999), this type of clause is simply interpreted as a complement clause and no distinction is made between subordination and embedding. See further Matthiessen and Thompson (1988) for the distinctions between embedding and subordination.

In (12), the embedded *that*-clause is composed of a hypotactic nexus. While maintaining the same topical Theme, i.e. *the need for labour*, the *while*-clause and its subsequent main clause are contrasted along the line of their corresponding Rhemes,

i.e. *a crucial factor* and *a supporting one*. In other words, both are acknowledged as representation of fact, but what is conveyed in the main clause seems to be the fact that the writer intends to highlight. Compare:

(12c) It would seem that the need for labour only plays a supporting role in guiding the direction of debasement.

In summary, the two sub-patterns of *that-while*-clauses discussed above are similar in the sense that both represent regressive sequence ( $\beta \land \alpha$ ), with *while*-clause preceding the main clause in a hypotactic nexus. However, with projecting *that-while*-clauses, as exemplified by the pattern "X *argues that while*", the source of the evaluation is foregrounded as the subject of the projecting clause, while the projection of fact typically involves an impersonal subject *it* and leaves the source of attitudinal meaning implicit. The reader is left to assume that any opinion expressed is that of the writer, or it is intended that the assessment is objective. Still, the two patterns are absent in the learner corpus. This could perhaps be linked to learners' preference for subjective stance markers, such as *I think* and *I believe*. *I think*, which is strongly associated with *but* in CLEC (See Chapter 5, Section 5.2).

### **6.1.3 Section summary**

To conclude, this section has presented the distribution of different syntactic positions of *while* and various sequences available to *while*-clause and the associated main clause in a hypotactic nexus in CLEC and BAWE-E. The interconnections between the positions of *while* at the orthographic level and the positioning of *while*-clauses to form three types of sequences at the level of lexicogrammar, are summarized in Figure 6.7 below.

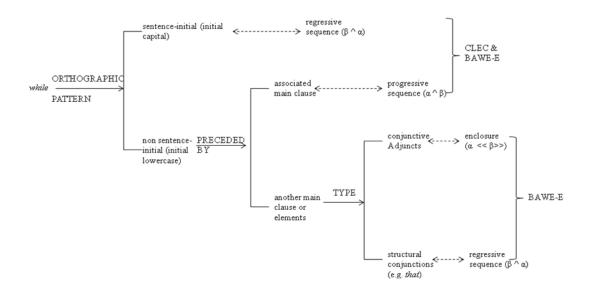


Figure 6.7 Summary of the interconnections between positions of *while* and positions of the *while*-clause

As illustrated in Figure 6.7, sentence-initial *while* corresponds to regressive sequence  $(\beta \land \alpha)$  in both corpora, whereas non sentence-initial *while* in BAWE-E can be preceded by the associated main clause thereby forming a progressive sequence  $(\alpha \land \beta)$ , or another main clause to form an enclosed structure  $(\alpha << \beta >>)$ , or structural conjunctions (notably *that*) forming a regressive sequence  $(\beta \land \alpha)$ . In terms of frequency, progressive sequence  $(\alpha \land \beta)$  is preferred in both corpora, but native-speaker corpus, BAWE-E is characterized by a more balanced distribution of the two sequences plus the enclosed *while*-clauses  $(\alpha << \beta >>)$ .

Given the distinct textual functions of enclosed *while*-clauses and *that-while*-clauses, these patterns have been explored in great detail. Enclosed *while*-clauses, characterized by initial conjunctive Adjuncts are deployed to provide the main clause with two levels of linking, i.e. cohesive and structural. While the structural relation encoded by *while* is typically the concessive type of enhancement, initial conjunctive Adjuncts are frequently found to be associated with two types of semantic relations, namely concessive and result. The two sub-patterns of *that-while*-clauses discussed in this section indicate that the structural and lexical class which co-occurs with these patterns serves the underlying communicative function in academic writing, which is

to report the ideas of other researchers or to adopt an objective stance.

## 6.2 Comparing initial and final *while*-clauses for different meanings in CLEC and BAWE-E

It has emerged from the discussion of different sequences of while-clauses and the main clauses that the positions of while-clauses and the meanings of while seem to be interconnected. However, the differences between initial and final while-clauses in CLEC and BAWE-E are not yet confirmed in qualitative sense. This section discusses the interplay of syntax and semantics in the use of while by two groups of writers. Thompson et al. (2007) have addressed the issues of initial and final adverbial clauses from the perspective of information structure. They note that initial clauses are 'bidirectional, linking what has gone before to what is to come', while a final clause is often 'unidirectional, primarily relating to its main clause' (p. 296). The investigation will draw on thematic structure and information structure to explain the differences between while-clauses in two positions in the two corpora. I will first present quantitative findings, providing frequency counts of different meanings of while associated with different positions of while-clauses in CLEC and BAWE-E (Section 6.2.1). This is followed by a discussion of the qualitative findings, namely how different positions are associated with different types of logico-semantic relations encoded by while (6.2.2).

# 6.2.1 Quantitative findings of initial and final while-clauses of for different meanings

In light of the expected difficulty in disambiguating all the occurrences of initial and final *while*-clauses for different meanings in CLEC and BAWE-E, it is more practical and reasonable to use the method of random sampling. As noted by Sinclair (2003), the small but detailed sample study makes it possible to manage the huge amount of data in a large corpus. Specifically, Sinclair (ibid) suggests using a small concordance sample—from about 30 lines to no more than 100—as a trial sample, and keeping an open mind, to form an initial hypothesis, which can be tested with another small

sample. To compare initial and final *while*-clauses for different types of logico-semantic relations in the learner corpus and native-speaker corpus, I randomly extracted from CLEC and BAWE-E 100 initial *while*-clauses plus 100 final *while*-clauses for a total of 400 data points. Then I manually annotated these clauses with three types of logico-semantic relations, namely adversative, concessive, temporal. This method is chosen also because the aim of the investigation is not to obtain exact statistical information from the corpora, but rather to use the corpus evidence as a starting point for qualitative analysis of initial and final *while*-clauses represented in the corpora.

Detailed analysis of the four groups of data reveals that initial and final *while*-clauses are used with significant differences across the corpora. See Figures 6.8 and 6.9 for initial and final *while*-clauses for different meanings in CLEC and BAWE-E.

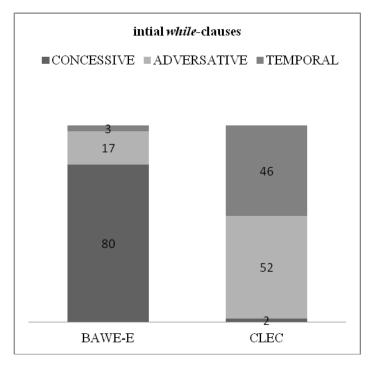


Figure 6.8 Initial while-clauses for different meanings in CLEC and BAWE-E

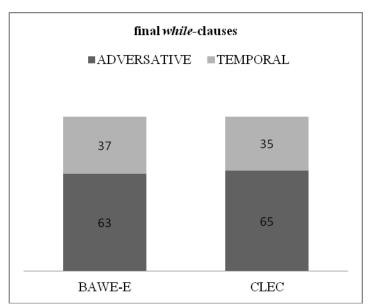


Figure 6.9 Final while-clauses for different meanings in CLEC and BAWE-E

As can be seen from Figure 6.8, highly interesting and significant differences emerge as to the use of initial *while*-clauses for different meanings across the corpora. Native speakers mainly use initial *while*-clauses to express concession (80 instances). By contrast, Chinese EFL learners make use of initial *while*-clauses mainly to mark adversative (52 instances) and temporal (46 instances) relations. With the exception of two instances, *while*-clauses are rarely used for concession in Chinese EFL learners' writing.

In contrast to the striking differences with respect to initial *while*-clauses across the two corpora, the use of final *while*-clauses seems to show less variation (see Figure 6.9). Final *while*-clauses fall into two semantic categories: adversative and temporal in both corpora. Concessive sense is not associated with final *while*-clauses.

In light of the quantitative differences with respect to the use of initial and final *while*-clauses by two groups of writers for different meanings, the differences observed needs to be refined with qualitative analysis of examples from the corpora. For purposes of comparison, in each of the following subs-sections devoted to initial and final *while*-clauses, I will start with the analysis of native speakers' use, and then

compare it with that of Chinese EFL learners. By so doing, it can be decided how Chinese EFL learners' use of initial and final *while*-clauses is deviant from the native-like norm represented by BAWE-E.

### 6.2.2 Initial while-clauses for the adversative sense

As mentioned in the previous section, initial *while*-clauses in BAWE-E are mainly deployed to encode the concessive sense. However, despite the relatively low frequency (17 instances) of adversative sense associated with initial position, the features of adversative use of initial *while*-clauses in BAWE-E allow us to make comparisons with the correspondent uses in Chinese EFL learners' writing, to be discussed later in this section.

A close examination of the instances of initial *while*-clauses for adversative relation in BAWE-E reveals that most of them involve two entities to be contrasted. Examples are given below. The contrasting entities are underlined for emphasis:

- (13) While <u>Homer's heroes such as Achilles and Hector</u> were judged on exploits in war, <u>Virgil's chief hero</u>, Aeneas, is judged on his descendants. (BAWE-E)
- (14) While the south was dominated by the Gothic kingdoms, the north-west Europe was much less centralized and the system of chiefdoms was predominant in the early stage of post-Roman times. (BAWE-E)
- (15) While the former solution seems to avoid the objection more easily without too much complexity, the latter way seems to be necessary once we look at what Preston calls the "most successful of Putnam's objections." (BAWE-E)
- (16) While Yieltsin tried to balance the influence of USA and its NATO allies, Putin has put Russian in a closer relationship with the West and has cooperated with US in areas vital to the latter's interest. (BAWE-E)

These examples reveal one of the most important defining features of the adversative

sense encoded by *while*, which is the introduction of a topical Theme (typically Subject) different from that of the initial *while*-clause. The elements which serve as contrasting entities are Subjects, which normally occupy the first position in the second clause and secondary position immediately after *while* in *while*-clauses.

In addition to the contrasting entities conveyed by topical Themes as significant initial signals of adversative sense, it is worth pointing out that equally important is the contrast conveyed by what follows the respective topical Themes of *while*-clauses and the main clauses, i.e. Rhemes. As can be seen from the examples above, the Rhemes of *while*-clauses and main clauses are characterized by having contrasting properties. In this sense, initial *while*-clauses for adversative sense involve a two-fold contrast. While the topical Themes carry the entities to be contrasted, the Rhemes carry the content of the contrast. The two-fold contrast enables initial *while*-clauses to express comparison and contrast between two entities, without favoring any of the two. In other words, adversative sense, meaning X and conversely Y (Halliday & Matthiessen, 2004) is motivated by the writer's need to compare and contrast two entities rather than to express personal views.

Similar to native-speaker writers' use of initial *while*-clauses for adversative sense discussed above, the contrasting elements are also identifiable in Chinese EFL learners' use of initial *while*-clauses with adversative sense. However, in terms of grammaticality, a closer look at instances of initial *while*-clauses with the adversative sense in CLEC reveals that surprisingly virtually all instances are misused. Examples are given below. The contrasting entities are underlined. Note that although the corpus is error-tagged, not all errors are tagged or consistently tagged.

(17) With more and more college students swarm into society, especially <u>in tapped</u> areas such as the coastal area in South-east China, skillful workmen with college certification are abundant. While <u>in north-west of China</u>, which still remains

unexploited [fm2, 1-], few students are willing to go to work there. (CLEC)

- (18) The chemical Building is obviously newly built. From the board on the gate of the building, you can see it's onated [fm1,-]in 1992 by a well- off patriotic overseas Chinese[sn9,-] While over the garden, the main building in A--the English teaching building, was built 50 years ago, Some windows are broken, too. (CLEC)
- (19) <u>In the past</u>, the graduates were allocated jobs by our government. The school leavers did not worry about the employment. While <u>nowadays</u>, the school and college leavers have many choices. (CLEC)
- (20) <u>Childen [fm1,-]</u> are often asked to kneel down before [wd4, s] graves to kowtow to ask for the dead's blessing. **While** the aduts [fm1,-] only bow making wishes. [sn8,s] (CLEC)
- (21) <u>President Clinton</u> declared that man will cure AIDS in ten years. While <u>some</u> <u>scientists</u> said, cancer won't be incurable 5 years later. (CLEC)
- (22) <u>Murder</u> is conducted to the interest of the killer against the will of the victim. While <u>mercy killing</u> is done to end the pain of those sufferers so that they can be relieved from constant anguishes of life. (CLEC)

From a semantic point of view, the fact that the contrasting elements are identifiable in examples (17)–(22) allows them to be interpreted as examples of adversative sense similar to those found in native speakers' writing. However, the problematic aspect of these examples lies in the fact that the initial *while*-clauses illustrated by these examples form cohesive links with preceding clause complexes instead of forming structural links with the subsequent main clauses. The elements to be contrasted with those of *while*-clauses are found either in the immediately preceding clause complexes as exemplified by (17), (18), (20), (21) and (22) or in clause complexes even more removed from the initial *while*-clauses as exemplified by (19). The discourse function of the initial *while*-clauses in these examples is similar to that of conjunctive Adjuncts such as *in contrast* or *on the other hand* which are typically deployed to express a parallel contrast between two contrasting elements of two

clause complexes. These findings demonstrate that Chinese EFL learners may not be fully aware of the distinctions between conjunctions and conjunctive Adjuncts.

It is also interesting to note that in addition to Subjects denoting people and non-human entities, the contrasting elements can also be realized by circumstantial Adjuncts denoting time and space as exemplified by examples (18) and (19). The circumstantial Adjuncts *over the garden* in (18) and *nowadays* in (19) are placed immediately after *while* for special adversative emphasis, that is to be a contrasting entity with their counterparts in the preceding text: *From the board on the gate of the building* in (18) and *In the past* in (19), respectively. These circumstantial Adjuncts in initial position are 'thematized' as 'marked topical Theme' (Halliday & Matthiessen, 2004). The choice of marked topical Themes in these examples reflects student writers' need to highlight these elements both as a contrast and as a setting.

### 6.2.3 Initial while-clauses for concession

As pointed out in the quantitative analysis, native-speaker writers' use of initial *while*-clauses for concession is the most striking difference between native-speakers and Chinese EFL learners' use of *while*. In the following, I will attempt to illustrate two distinguishing features of initial *while*-clauses used for concession with examples from BAWE-E, namely i) equivalence of topical Themes and ii) semantic incompatibility or logic opposition between the Rhemes of *while*-clauses and the main clauses.

To start with, the distinguishing features of concessive *while* in terms of topical Themes will be discussed with examples from the corpus. Examples are given below.

- (23) While these attacks boast some plausibility, Wiseman is unconvinced that this technique is entirely successful. (BAWE-E)
- (24) While he should see through her lies, he is too delighted and overwhelmed with

his wife's pretended display of affection to question her honesty. (BAWE-E)

(25) While the written sources agree that she was the most beautiful of all women, they contradict each other on almost everything else about her. (BAWE-E)

As shown by these examples, the contrasting topical Themes, characteristic to adversative use of *while*, are not available in concessive context. Instead, these examples demonstrate that in concessive context, it is common for the topical Themes (underlined above) of *while*-clauses and the subsequent main clauses to be equivalent.

The equivalence of topical Themes between the initial *while*-clauses and subsequent main clause scan be realized by different means, such as by repetition of the same word, as in example (24), or by the anaphoric link between pronouns functioning as topical Themes in the main clauses and the topical Themes of *while*-clauses, as in example (25), or even by implicit devices to link the topical Themes (23). Topical Theme-equivalence is easily recognized within the clause complex containing *while* by the former two devices. The latter device, however, is dependent on drawing inferences from the preceding text, which may involve several clause complexes, as exemplified by the preceding text of example (23), quoted below in (23a).

(23a) (Throughout The Famous Tragedie, the writer aims to thwart these efforts by depicting the leaders of the Parliamentarian army as licentious, deceitful villains. The writer shapes Reformists as destructive devils whose plans are 'hatch'd in Hell' (II). This comparison implies that to be a Reformist is to support the greatest enemies of God and assist them in infecting Christianity. In addition, the writer implies that Cromwell and Peters are sophisticated Machiavellians who lack the moral capacity that provides the foundations of any religion. Peters is seen extending his unethical behaviour to Mrs Lambert by successfully persuading her to be unfaithful to her husband, while Cromwell's application of his intellectual strength to deceive his public is a constant reminder that he cannot be trusted.) While these attacks boast

some plausibility, Wiseman is unconvinced that this technique is entirely successful. She considers that the writer's extension of satire towards 'physical attributes and sexual transgressions' simply registers 'the increasing hopelessness of the royal position' (Wiseman, Drama and Politics, p. 68). (BAWE-E)

In (23a), the topical Theme of the *while*-clause, i.e. *these attacks* refers to what is said in a series of clause complexes in the preceding text (in brackets) that functions as one unit whole. The unity of these sentences is evidenced both structurally and lexically. First, in terms of text structure, the conjunctive element *in addition* reveals that these clause complexes linked cohesively in an additive relation are concerned about the same topic, i.e. negative judgment of the roles in *the Famous Tragedy*. Secondly, these clause complexes are also linked by the chains of related words (underlined) that contribute to the continuity of lexical meaning of *attacks*. These words function to build up the negative judgment of the roles in *The Famous Tragedy*. The negative judgment conveyed in these clause complexes is then mentioned in the topical Theme of the initial *while*-clauses-clause i.e. *these attacks*, which obviously functions as summary of the preceding text. This topical Theme is then 'picked up' by the topical Theme of *that*-clause of the main clause following *while*-clause, i.e. *this technique*. In this way, *this technique* can be interpreted as an equivalent of *these attacks* meaning "this technique of making these attacks".

An important point revealed by the above analysis is that concessive clauses pertaining to text-layer have to do with the organization of discourse and apply to text units beyond one clause complex. The corpus-based study of conjunctions has to be complemented with discourse analysis. In order to explore the role of context in the use of these conjunctions, text-based analysis will be presented in Chapter 9.

In addition to topical Theme-equivalence, the analysis of example (23) in the above also reveals another important feature of initial *while*-clauses used for concessive

meaning. That is, when initial *while*-clauses are used for concessive meaning, they tend to represent information that has been mentioned in the preceding text. In this way, initial *while*-clauses are linked backward to the subsequent main clause through topical Theme equivalence, and forward to the preceding text. As Thompson and Longacre (1985) suggest, initial hypotactically related clauses (adverbial clauses) often serve to distill information from the preceding discourse to present it as the point of departure for the next move.

To further illustrate the link between initial *while*-clauses and the preceding text, the original preceding context of (24) and (25) is quoted below (in brackets).

(24a) (In today's society, as in that of Ancient Greece, the name 'Helen of Troy' symbolizes the epitome of female beauty. One of the few female characters in the Iliad, an epic dominated by men and their concerns, namely war, Helen remains something of a mystery to us.) While the written sources agree that she was the most beautiful of all women, they contradict each other on almost everything else about her. (BAWE-E)

In (24a), it is obvious that referential they in the main clause they contradict each other on almost everything else about her is linked back to the topical Theme of while-clause, i.e. the written sources. What is presented in while-clause the written sources agree that she was the most beautiful of all women is a repetition of certain words (underlined) of preceding text, i.e. the name 'Helen of Troy' symbolizes the epitome of female beauty. In contrast, the main clause conveys new information, to be carried onto the text that follows: Her personality and the question of how much she is to blame for the Trojan war has been disputed throughout antiquity and the more recent past.

(25a) (She constantly pushes the boundaries of his tolerance by behaving rudely to his family and refusing to spend time with him. However, most things escape his notice

because his naivety cannot contend with <u>her advanced skills in manipulation and deceit</u>. An example of this can be seen in the fourth act of this play when Hedda <u>pretends that she burnt LÃ yborg's manuscripts in concern for his interests.</u>) While he should see through her lies, he is too delighted and overwhelmed with his wife's pretended display of affection to question her honesty. (BAWE-E)

In (25a), the topical Theme *he* is maintained between initial *while*-clause and the main clause. The initial *while*-clause is linked backward to the text that stretches across three successive clause complexes describing *her lies*. Synonyms *manipulation and deceit, pretend* in the preceding text all contribute to the sense of *her lies* mentioned in *while*-clause. In this way, the initial *while*-clauses-clause functions as a bridge between preceding text and the subsequent main clause.

As we have seen in each of the three examples, topical Theme equivalence or relatedness reflects the 'bi-directional' nature of *while*-clauses used for concession (Thompson et al., 2007). They note that initial while-clauses are 'bidirectional, linking what has gone before to what is to come' (p. 296).

After discussing the equivalence or relatedness of topical Themes, I will now turn to the feature of Rhemes of initial while-clauses for concession. As opposed to the easily recognizable feature of topical Theme-equivalence, the Rhemes of *while*-clauses and main clauses are found to involve logic opposition between what the writer expresses in the main clauses and what the reader presupposes from *while*-clauses.

In analyzing the logic opposition or semantic incompatibility between Rhemes, I will consider the same group of examples discussed above to complete the discussion on features of initial *while*-clauses for concession.

(23) While these attacks boast some plausibility, Wiseman is unconvinced that this

In (23), the semantic incompatibility is found between positive evaluation of these attacks conveyed by the Rheme of while-clause, i.e. boast some plausibility and negative evaluation of this technique conveyed by the Rheme of the that-clause, i.e. unconvinced ... entirely successful. The incompatibility results from an expectation denied. That is, the normal consequence following boast some plausibility would be successful, which is denied by unconvinced in the main clause. The semantic incompatibility, however does not yield equal weight of the two clauses as in the use of while for adversative sense. Instead, what is conveyed in while-clause is regarded to be of less importance as compared to the surprising bit of information in the main clause. As discussed in Mann and Thompson (1988), concession can be distinguished from multi-nucleus contrast according to the writer's point of view. That is, the writer's positive regard is expressed towards what is conveyed in the main clause. With the use of "Wiseman" as topical Theme of main clause, the evaluation is attributed to a third person other than the writer.

(24) While he should see through her lies, he is too delighted and overwhelmed with his wife's pretended display of affection to question her honesty.

The writer of (24) asserts in the Rheme of the main clause that *he*, topical Theme of both clauses, *is too delighted and overwhelmed with his wife's pretended display of affection to question her honesty*, which is incompatible with what is presupposed from Rheme of *while*-clause, i.e. *should see through her lies*. That is, the expectation from "see(ing) through her lies" in the *while*-clause would normally lead to "question her honesty" in the main clause, which is denied, and thereby giving a sense of concession. However, it is important to note that it is the presupposition from the *while*-clause that is denied, rather than the explicit proposition conveyed by the *while*-clause.

(25) While the written sources agree that she was the most beautiful of all women, they contradict each other on almost everything else about her. (BAWE-E)

Similarly, in (25), apart from the equivalence of topical Themes, the semantic differences between agree and contradict in the Rhemes of the two clauses is obvious. After stating the fact that the written sources agree that she was the most beautiful of all women, it is surprising to say that they contradict each other on almost everything else about her. It is surprising because normally and according to our knowledge of the world, the two state-of-affairs conveyed by the initial while-clause and the main clause, although both being true at the same time, do not occur together or follow each other. The result of this incompatibility bears directly on the discourse function of the concessive use of while — what is conveyed in the subsequent main clause, especially by the Rheme, turns out to be the writer's real purpose of communication, which corresponds to new information.

The properties of initial *while*-clauses used for concession are summarized below. The property of topical Theme-equivalence implies that the two clauses in the hypotactic nexus must have a common basis for establishing the contrast. The common basis is usually expressed by equivalence or relatedness of topical Themes. However, it is worth pointing out that topical Theme-equivalence or relatedness is not restricted to a word-to-word correspondence between two subjects or an anaphoric link between a pronoun and an entity. Instead, topical Theme-equivalence may also be inferred from context. On the other hand, as opposed to the topical Theme-equivalence, the contrast is realized by the incompatibility or logic opposition between the Rhemes of the two clauses, which is highlighted on the surface by the lexical differences of the adjectives or nouns or verbs in the predicates. At a deeper level, the semantic incompatibility is characterized by involving a presupposition from the *while*-clause, which is denied.

### 6.2.4 Final while-clauses

As opposed to the sharp contrast in initial *while*-clauses used for different meanings by the two groups of writers, final *while*-clauses are characterized by adversative sense in both corpora.

As revealed by the analysis of initial *while*-clauses for adversative sense in Section 7.2.2, contrasting topical Themes and contrasting Rhemes are characteristic of the adversative sense of *while*. It is also revealed that the two clauses have equal rhetorical weight. Therefore, even if the sequence of *while*-clauses and the main clauses are exchanged, the adversative sense remains constant. Examples of final *while*-clauses used for adversative sense in both corpora are given below:

- (26) <u>Mina Harker</u> embodies all the good womanly virtues, **while** <u>Lucy Westenra</u> is a voluptuous blood-lusting animal. (BAWE-E)
- (27) <u>In the past</u>, there were more academics cling to the theory that consumers are passive recipients of commercial information and promotional messages (Varey, 2001), while <u>today</u>, consumers become much more independent and sophisticated in using a wide range of marketing communication tools to acquire the information associated with their consumption activities. (BAWE-E)
- (28) Meyer-Levy's previous research (1988) demonstrated that <u>females</u> tended to explore more detailed information before making decisions, **while** <u>males</u> relied on more objective cues, only available information, and their own opinions. (BAWE-E)
- (29) <u>His father</u> was a superior officer of the Kuomindang government, **while** <u>he</u> was influenced by the progressive ideas. (CLEC)
- (30) <u>Institute of Chinese Medicine</u> is very crowded, **while** <u>here</u>, the chefs in the dining room enjoy free time, not [,0-5] so many students visiting here. (CLEC)
- (31) <u>Modern industry</u> creats various kinds of pollution, such as wast water, refuse, noises and so on, while <u>modern agriculture</u> destructs large quantity of grassland or forest into farmland, causing the erosion of soil. (CLEC)

First, the contrasting entities, which function as first signals of the adversative sense are easily recognizable in these examples (underlined). Syntactically, these elements take the first position in the main clause and the second position immediately after while in while-clause. Except examples (27) and (30) both of which represent marked topical Themes, the remaining examples all take Subjects as the contrasting entities and as the point of departure of the clause. In each of these examples, main clause and while-clause have their own topical Themes as independent points of departure and corresponding Rhemes.

In addition to contrasting topical Themes, the contrast reflected in the Rhemes carries the content of comparison and contrast, which is characterized by the use of antonyms, such as the good womanly virtues-voluptuous blood-lusting animal; passive-independent; more detailed information-only available information in BAWE-E examples. However, it should be noted that although the Rhemes are in contrast with each other, they do not contradict each other. None of these BAWE-E examples involve any contradiction with information presupposed from the reader, i.e. there is no sign in the text that such a contradiction exists. Therefore, the discourse function of final while-clauses for adversative sense is mainly to objectively describe the two-fold contrast between two topical Themes and their corresponding Rhemes represented in while-clauses and main clauses, irrespective of their order. It can thus be said that the adversative sense of while requires Rhemes of while-clauses and main clauses to be i) in contrast; ii) compatible. That is, the Rhemes of while-clauses and main clauses need to be in contrast without involving any incompatibility between them.

The problematic aspect of two of the CLEC examples, namely (29) and (31), repeated below seems to be attributed to the failure to follow the above two restrictions.

(29) His father was a superior officer of the Kuomindang government, while he was

In (29), with contrasting topical Themes, what is conveyed in the Rheme of main clause seems to involve a presupposition, "a superior officer of the Kuomindang government does not have progressive ideas". This implied message is in contrast with the explicit message of Rheme of *while*-clause, i.e. "influenced by progressive ideas". Consequently, via the presupposition, the two topical Themes are characterized by having contrasting properties. However, since any presupposition from the main clause would be problematic in the context of adversative sense, (29) cannot be interpreted to be comparing "his father" and "him" in respect of their mentality. On the other hand, because of the explicit contrast in topical Themes, a concessive interpretation would also be problematic.

(31) <u>Modern industry</u> creats various kinds of pollution, such as wast water, refuse, noises and so on, **while** <u>modern agriculture</u> destructs large quantity of grassland or forest into farmland, causing the erosion of soil. (CLEC)

As can be seen from the explicit message conveyed in both clauses of example (31), it is obvious that because the Rhemes carry no contrast at all, the use of *while* is problematic. Despite the difference of topical Themes, i.e. *modern industry* and *modern agriculture*, both Rhemes convey negative evaluation, which do not seem to be in contrast.

### **6.2.5 Section Summary**

This section has thrown up some interesting findings regarding the differences in the use of initial and final *while*-clauses for different meanings by Chinese EFL learners and native speakers. Based on a total number of 400 randomly-selected instances of initial and final *while*-clauses from CLEC and BAWE-E, the analysis has shown that initial *while*-clauses are mainly used in the adversative sense and temporal relations

by Chinese EFL learners, whereas native speakers rely on initial *while*-clauses to signal a concessive relation between two clauses. In contrast, final *while*-clauses used by both groups are associated with the adversative sense of the conjunction. Therefore, it seems justifiable to conclude that concession is characterized by initial of *while*-clauses in BAWE-E, whereas the adversative sense of *while* is more likely to be associated with final *while*-clauses in both native-speakers and Chinese EFL learners' writing.

Following the discussion on the interconnections between positioning of whileclauses and the types of logico-semantic relations encoded by while, the functional differences between concessive and adversative sense of while have been analyzed with thematic analysis of clause. As discussed in Fries (1981), the thematic system divides a clause or clause complex into the two functions, Theme and Rheme. The function of Theme, according to Fries (1981), is to provide a framework for the reader to interpret the message which is about to come. The adversative use of while is characterized by contrasting topical Themes and contrasting Rhemes in both clauses. The contrast conveyed by the topical Themes, typically subjects, is significant first signals of adversative sense of the conjunction. The contrast conveyed by Rhemes following the respective topical Rhemes carry the content of the contrast. The twofold contrast between topical Themes and Rhemes associated with the adversative sense of while leads to the equal rhetorical weight of the two clauses in hypotactic nexuses. In contrast, concessive use of while is associated with equivalence or relatedness of topical Themes and logic opposition between Rhemes of while-clauses and subsequent main clauses.

## 6.3 Further evidence of the distinction between adversative and concessive sense of *while*

This section further investigates the distinctions between the adversative and concessive uses of *while* in terms of the preferred co-occurring patterns of the conjunction. To identify the phraseological profiles of *while* in the native-speaker

corpus, a search engine called ConcGram (Greaves, 2005) is used. The program allows the automatic extraction of 'concgrams' (Cheng et al., 2006), which are sets of words that co-occur regardless of constituency variation (e.g. AB and A\* B), positional variation (e.g. AB and BA), or both (Greaves & Warren, 2007; Cheng, 2008). A two-word concgram search of *while* reveals that the modal operator *may* represents the most frequent word co-occurring with *while* in BAWE-E. Overall, the corpus yields 79 instances of two-word concgram "while/may". The analysis presented in this section is based on the cases of *while* which co-occurs with *may* within one clause complex, i.e. on 59 instances. The remaining 20 instances of *while* co-occurring with *may* in two separate clause complexes are not meaningfully associated and are thus excluded from further investigation. A closer consideration of *may* in these instances reveals that all instances of *while*/may follow the same sequence of "while ... may ... + main clause". This tendency seems to suggest that, modal operator *may*, if present, tends to be placed in initial *while*-clauses followed by the main clauses.

The aim of the investigation presented in this section is to find out whether there is a connection between the co-text and the occurrence of may in while-clauses. Naturally, the first functional element to be considered is Subject, because of its immediate proximity to both while and may in the pattern "while + Subject + may".

The analysis presented in this section draws on Halliday and Matthiessen's (2004) functional interpretation of the Subject as the carrier of modal responsibility, and as the warrant of the exchange. According to Halliday and Matthiessen, from an interpersonal point of view, Subject is that which something is being predicated (that is, on which rests the validity of the argument). From a textual point of view, Subject is the element that which is the concern of the message.

Closely related to Subject in the interpersonal function of clause as exchange is the

Finite element. According to Halliday and Matthiessen (2004), Subject and Finite combine to form one constituent, the Mood. The rest is regarded as Residue of the clause (Halliday & Matthiessen, 2004). The Mood element is the part of the clause that embodies the dialogic nature of text, as suggested by Martin et al. (2010).

The Finite element is one of a small number of verbal operators expressing tense (e.g. is, has) or modality (e.g. can, must). According to Biber et al. (1999, p. 485), modal verbs can have two different types of meaning, which can be labeled intrinsic and extrinsic (also referred to as 'deontic' or 'root' and 'epistemic' meanings). Intrinsic modality has to do with ability, permission, volition and obligation with regard to an action. Extrinsic modality refers to logical status of events and states, usually relating to assessment of likelihood: possibility, necessity, or prediction. In English, most modals can express both root and epistemic meanings. For example, may can express both root and epistemic possibility. However, as Biber et al. (1999) have noted, may is frequently used with extrinsic meaning in academic prose. They also point out that epistemic meanings usually occur with non-human subjects. One of the aims of this section is to test to what extent the corpus data complies to this structural correlate of modal verbs with extrinsic meanings. My contribution to this question is limited to the case of may in while-clauses. It is interesting to note that while Biber et al.'s (1999) discussion on modality focuses on the meanings of English modal verbs, Halliday (1970) considers modalities to be those meanings related to the assessment of probability, which can be realized by modal operators and modal Adjuncts. A modality is expressed by a form which represents "the speaker's assessment of the probability of what he is saying, or the extent to which he regards it as self-evident" (Halliday & Matthiessen, 2004, p. 328).

#### 6.3.1 Subject in while-clauses containing may: a quantitative description

Before attempting to establish the relation of subject selection to *may* in *while*-clauses, this section examines the formal realization of Subjects in the pattern "while + Subject

+ *may*".

First, the concordance lines of all instances of *may* in *while*-clauses, following the pattern "*while* + Subject + *may*" in BAWE-E, are presented in Figure 6.10 below. The first word following *while*, which is also the first word in the nominal group functioning as Subject of the clauses, is highlighted in red (first-word right sorted).

```
N Concordance
 1 to take part in the political process. The authors explain that, while a subject culture may foster resentment in the masses
            the data is not annotated in terms of existing theories While annotation of corpora may be helpful in searching
 2
      place them at severe risk of exploitation. He questions that while confidentiality may be in accordance with the research
      of social hierarchy is an unattainable ideal. He implies that, while Cromwell may publicly reject the hierarchical structure of
    This means the sentence is 'doubly-relativised'. For example, while 'I am fat' may be true at context C in world W (a world in
     from a concentration of work skills and such like. Therefore, while individually they may not have had economies of scale.
    ability for unions of different trades to bargain for themselves. While it may be seen as submissiveness and that 'almost all
         in both developed and developing nations illustrate that "[while] it may be difficult, . . . it is not at all impossible to
9
       (Travel autobiography, p.2) and "it had dawned on me, that while it may be comfortable and easy, it would also be a
       of society for us to abandon Weber's approach at present. While it may present difficulties in the analysis of distinct
10
11
         upon the German scene. Historians have suggested that while it may be true that many members of the American
12
      past have believed in what he calls a 'superhuman nobility'. While it may always have been an illusion, individuals needed
13
      within the boundaries of one modern farm (Scott 1947: 16). While it may be the case that these buildings were not
       of state organisation, such as the extent of centralisation. While it may seem problematic to generalise about state form
14
15
     more typical word, any pattern is subject to variation so that while it may be said that a certain group of words occur in a
          rumours that are stretched outside credible boundaries. While it may have been necessary to produce shocking
       rebellion does not have any gain for her, so writes Sewell: 'While Katharina's individual protest may provide a temporary
17
18
           patients went to church, had amusements and music. 'While moral treatment may have disappeared without a trace
19
      that many great leaders are created only by their followers. While most examples of charismatic leaders may be taken
20
      top 5% of the population had lived in extreme comfort, and while much of their 'paper money' may have vanished in the
      passionate concern for the planet (Reser, 1995, p.252). For while psychologists may not be able to add to the debate
21
     Critical Difference (John Hopkins University Press 1980) Yet while publicity and marketing may construct the author as a
22
    suspects about what they are signing on the custody record. While self-regulation of the police may appear the most
    not a system-reformer or system-transforming revolutionary". While some may argue this is simply indicative of an apathy
25
               some people may work harder when less satisfied while some people may work less hard when more satisfied. In
26
      -by lowering total surplus even more. However an increase, while still being consumption inefficient, may increase or
           place, an employee who is dismissed by his employer while taking industrial action may lose his right to claim unfair
28
   so which, in our opinion, they have not", ibid at p 266 </fnote>While tax avoidance schemes may be authorised under the
29
          poses a challenge to moral and social norms. However, while the vocabulary and contents may be subversive in terms
30
    -emerging-Eastern-European-markets for new-export markets while the dollar recovers. Simultaneously, 2005 may-see
       and there is an inclination towards scientific management. While the organisation may be very competent and profitable,
31
32
      via Crete would appear somewhat of a diversion. Therefore, while the coastal route may have been the main south to north
            to whole structures rather than just to shell artefacts. While the uneven excavation at Dimini may have biased our
33
34
         that their answers were used to draw such a conclusion. While the publishing of results may put the subjects at risk,
35
       by the higher social class. Therefore it can be argued that, while the attitudes towards leisure may be changing, in the
36 have little else to rely for food or money, will continue to hunt. While the consumption of certain species may seem
     is the principal basis of this distinction. In a lenis obstruent, while the consonant itself may or may not be voiced, there is
37
38
     of them may rely more on the flexibility than on the planning while the others may be different; it may due to the difference
39
           would almost certainly mean a loss of CCP control, so while the party leaders may have been convinced that
       is not a wise choice. The economic payoffs are short-lived while the social degradation may be long-lasting. Export
40
41
        of the sentence has a truth value within the context C. So while the sentence 'I am fat' may be true at context C in which
42
       the threshold, and many internal conflicts fall short of this. While the intention may have been not to become involved in
     number ever carried out in the U.S. within three years. Thus while the Americans may have influenced the basic structure
          Journal of Contemporary China Vol. 12: p. 276, </fnote>While their fears may be understandable, yet military figures
44
45
     alleviate concerns of potential over-application. Procedurally, while there may remain an element of doubt as to the need for
              for land and need for defences as described above. While there may have been a certain level of regional diversity
47
     ethnic group, for example, often leave out basic differences; while there may be different categories for 'Indian', 'Pakistani'
48
     ploys are used to trick them into buying unhealthy products. While these may be valid points, and perhaps we are
      consequences for the structure of the international system. While these new actors may not altogether dethrone the
49
50
          force in one being the most glaringly obvious. However, while these may have taken on a greater importance after the
51
             a liberty which has punctuated her life with vibrancy. While they may pity her, she is satisfied that their lives are
52 Understanding International Relations Palgrave p.141 </findle>While, this inherent problem may produce ineffectiveness, for
53
       organisations other than the army in a short span of time. While this approach may have benefited organisations in
54
      'man' we would probably now call a 'living human organism'. While this definition of man may rely on the body, his concept
    to believe it is possible to conceive of an unperceived object. While this may be rhetorical there is some reason for it. His
55
    creditors, bear all the costs of failure". It can be argued that, "while this governance structure may control managers, it
56
57
      by the police are often incomplete or insufficiently detailed. While this may be due to innocent mistakes, the disparity in
58
            is thus to describe how our inductive inferences work. While this may at first appear a trivial problem, Lipton is quick
     in its conception and in its implementation...'(White, 1993). While this may be thought of by some as a particularly harsh
59
60
      - to universal statements such as theories and hypotheses. While this may intuitively satisfy our idea of how science is
61
             a model for a form of association ( ) in which each, while uniting himself with all, may still obey himself alone, and
     claims that justice is the fulfilment of our human nature, and while we may agree that this is the best way to recommend
```

Figure 6.10 Concordance lines of while...may in BAWE-E

Serbia and Croatia, 1990-1997", p. 109. lbid., p. 120. </fnote>While women may play an assertive role in ethnic conflicts,

As revealed by the concordance lines in Figure 6.10, the Subjects of *while*-clauses are predominantly realized by demonstrative reference items such as *this, these, the,* and *it,* either alone (*this, these, it*) or combined with a noun phrase. Of the 59 instances of "while ... may" in the corpus, the Subject is realized by demonstrative reference (+ noun) in 37 (60%), as in Table 6.5 below.

Table 6.5 Subject realizations in while-clauses containing may

Subject	N
the	14
it	10
this	9
these	3
there	3
they	2
we	1
others	12
Total	59

The relatively high proportion of demonstrative Subjects in *while*-clauses is also linked up to the choice of non-human Subjects. As opposed to personal reference items (*he, his, she, her*, etc.) which point to person, the demonstrative reference items give no indication of animacy, which can refer to human or non-human entities. However, in the case of *while*-clauses containing *may*, the demonstrative items (alone or together with a noun phrase) in Subject position, all refer to non-human entities. Taking in to account both demonstrative and non-demonstrative Subjects, overall, Subjects in the pattern of "*while* + Subject + *may*" are most often used to denote non-human entities. With only 9 instances of Subjects pointing to human, non-human Subjects (50 instances) make up 85% of the total instances (59 instances).

The choice of demonstrative pronouns as Subjects in these instances, however, is not arbitrary. Guided by Sinclair's (2003) view that meaning is created through the coselection of words, the following section aims to account for the relation of Subjects to *may* in *while*-clauses.

### 6.3.2 Relation of Subject selection to modality in while-clauses

In this section, the choice of demonstrative pronouns as Subject in *while*-clauses containing *may* will be explained with reference to the textual and interpersonal meanings of Subject. An example is given below.

(32) While this approach may have benefited organisations in several ways, it is considered non-strategic because it completely ignores business strategy (BAWE-E)

First, we shall present the analysis of Subject of *while*-clause in (32) from a textual point of view. Each clause in example (32) chooses Subject as the point of departure, i.e. as topical Theme. The Subject of *while*-clause, i.e. *this approach* is carried over to the subsequent main clause and the following *because*-clause. The basic sense of *this*, according to Halliday and Matthiessen (2004) is "that of proximity". *This* typically refers either anaphorically, to something that has been mentioned immediately before or else cataphorically, to something that is to come (p. 558). Example (32) has shown that *this* refers forward (cataphorically) to *it* in the main clause and the following *because*-clause. Meanwhile, in order to show that *this* also refers back (anaphorically) to the preceding text. The preceding text of (32) is quoted below in brackets of (32a) to show the full range of the referential link of *this*.

(32a) (<u>Traditional approach</u></heading><u>The traditional approach to recruitment and selection</u> gave very little or no importance to business strategies. <u>It</u> downplayed the link between staffing decisions and an organisation's business strategy. The aim was to find a person who could fit the job perfectly and to recruit people who could perform the best in the given job. <u>The use of this approach</u> was also seen extensively during the First World War, where cognitive ability tests were used by the armies of US, UK and France wherein soldiers employed were simply placed in a job where they were best suited without taking into consideration the strategies formulated by the army. <u>This</u> was a very successful practice and became extremely popular among

organisations other than the army in a short span of time.) While this approach may have benefited organisations in several ways, it is considered non-strategic because it completely ignores business strategy. (BAWE-E)

As shown by (32) above, *this* in *while*-clause, refers back to the Subjects in a series of preceding clause complexes. The identity of *this approach*, Subject of *while*-clause, is not fully recovered until the first clause complex under the heading "traditional approach". The Subject, *this approach*, also topical Theme of *while*-clause, provides topical continuity for the development of clauses in the proximity of *while*-clauses. The textual function of topical continuity discussed here could be linked up to the bidirectional operation system explored in great detail in the discussion on initial *while*-clauses in Section 6.2.3. The bidirectional property is best captured in the use of demonstrative reference items as Subject of an initial *while*-clause. Note that the demonstrative reference item *it*, *these* can have similar functions to achieve text reference.

Having analyzed Subject from a textual point of view, the analysis presented below will focus on the interpersonal interpretation of Subject, which is closely linked to the element Finite, *may*. As discussed in Section 6.3.1, according to Halliday and Matthiessen (2004), Subject and Finite comprise the Mood element. They argue that "the mood element carries the burden of the clause as an interactive event" (p. 120). Example (32) is analyzed in terms of mood structure in the diagram below.

β	While	this	may	benefited	organisations	in several
		approach	have			ways
	Conjunction	Subject	Finite	Predicator	Complement	Adjunct
		Mood	od Residue			
α	α	it	is	considered	non-strategic	
		Subject	Finite	Predicator	Complement	
		Mood		Residue		
	β	because	it	completely	ignores	business
						strategy
		Conjunction	Subject	Modal	Finite/Predicator	Complement
				Adjunct		
			Mood		Residue	

Figure 6.11 Analysis of example (32) in terms of mood structure

By examining the mood structure clause by clause, we can see the way the clause complex proceeds as a series of exchanges. As highlighted in bold in Figure 6.11, the exchanges revolve around the Subject of the while-clause, i.e. this approach. While the Subjects within Mood remain the same in the while-clause and the subsequent main clause, the most prominent contrast lies in what is conveyed in their respective Residues. The Residue of the while-clause, i.e. benefited organizations indicates a positive evaluation, whereas the Residue of the main clause, i.e. non-strategic indicates a negative evaluation. Furthermore, with a difference in the Finite element within Mood, the negative and positive evaluations differ in the degree of possibility attached. With a modal element may incorporated in while-clause, the possibility of positive evaluation conveyed explicitly in the Residue of the while-clause is conceded, whereas the negative evaluation is asserted. The use of subjective mood may have further raises the proposition conveyed in the while-clause to non-real facts. As noted by Biber et al. (1999, p. 500), the association of possibility modals such as may with perfect aspect usually marks a certain degree of doubt about past events or situations. Therefore, the while-clause and the subsequent main clause contribute to the sense of concessive by assigning different degrees of possibility enacted about the common Subject, i.e. this approach. The while-clause is conceded by modality meaning carried in a Finite element, so that the validity of the proposition is arguable and negotiable.

As mentioned above, a low modality conveyed by *may* functions to highlight the effect of conceded proposition conveyed by the *while*-clause. However, it should be noted that it is the effect of 'highlighting' that we are arguing for. The modal Finite *may* is not an obligatory element of *while*-clause in a concessive context. Indeed, if 'may' is to be deleted from example (32), the concessive sense can be perceived as well. Compare:

(32a) While this approach may have benefited organisations in several ways, it is considered non-strategic because it completely ignores business strategy (BAWE-E).

As mentioned earlier in Section 6.3.1, all instances of meaningfully associated *while* and *may* are associated with the concessive use of *while*. The Finite *may* gives the proposition conveyed in *while*-clause an additional modal element to make it negotiable. In other words, although *may* is an optional element in the concessive use of *while*, it serves as further evidence of the use of *while* as a concessive conjunction, which is to be distinguished from its uses in temporal or adversative sense.

So far it has been tacitly assumed that Subject (topical) continuity is one of the formal properties of *while*-clauses containing *may* used for concession. Subjects in *while*-clauses containing *may* tend to be realized by reference pronouns which maintain topical continuity with both the preceding text and the text that follows. However, it worth noting that in cases of the pronoun *it*, the topical continuity is not necessarily maintained. First, a distinction has to be made between cases like (33) and (34).

- (33) While it <u>may</u> present difficulties in the analysis of distinct forms of unequal relationships, in a more general sense the three-dimensional approach is crucial, as can be seen from the discussion over whether we have now entered a 'classless' society. (BAWE-E)
- (34) While it may be the case that these buildings were not occupied simultaneously,

the evidence suggests that these were in use over a long period of time (Scott 1947: 16) and so are likely to have been at least partly contemporary with each other. (BAWE-E)

The pronoun *it* in (33) is similar to that of *this* in example (32) discussed above. It is used to refer to an entity recoverable from either preceding or following text, thus achieving a predominantly ideational function (see Halliday, 1994). The Subject *it* in (32) points both backwards and forwards in the text. As a result of its backward-pointing potential, *it* provides a link between the information conveyed in the *while*-clause and what has come before that. Matthiessen (1995) suggests "if such an item (demonstrative pronoun) serves as Theme, it "distills" meaning referentially and contributes a "summary" of segment of text meaning" (p. 568).

Unlike the Subject it in the while-clause of (33), the pronoun it in (34) is a 'Subject placeholder' (Halliday & Matthiessen, 2004) or anticipatory it (Quirk, et al., 1985). The function of the pronoun it is to anticipate the notional subject, which is postponed. In (34), the Subject it refers cataphorically to that-clause following the case, i.e. these buildings were not occupied simultaneously. Based on Halliday's (1994) distinction between Theme and Rheme, the anticipatory it is Theme and the rest of the clause is Rheme. The anticipatory it expresses given information, whereas the Rheme expresses new information. Therefore, by using an anticipatory it, the writer of (34) postpones the new information to the end of the clause. Martin et al. (2010) suggest that clauses with anticipatory it are analyzed as having a discontinuous constituent as Subject. They further point out that there may be textual reasons for placing the 'content' of the Subject role in a position in the clause where it will be 'news', particularly when an embedded clause functions as Subject. Similarly, Quirk et al. (1985) argue that anticipatory it or extra-position is a special device for structuring information, which is employed when end weight or focus should be given to the postponed element. Compare:

(34a) While that these buildings were not occupied simultaneously may be the case, the evidence suggests that these were in use over a long period of time (Scott 1947: 16) and so are likely to have been at least partly contemporary with each other.

In addition to the information structural consideration, the discontinuous Subject as exemplified by example (34) has a more important function to express objective modality. As Halliday and Matthiessen (2004) note, while there is no participant doing the projecting, a fact may be projected impersonally. In example (34), *it may be the case* is a relational process construing the 'objective' modality, in which *it* is a participant in a relational clause. Biber et al. (1999, p. 1019f) give a list of lexical bundles which are found with anticipatory *it*, such as *it is possible that*, *it is true that*, *it is clear that*, etc. They emphasize that the adjectives in these lexical boundless "report the stance of the writer; for example, possibility/ likelihood, importance, necessity" (p. 1020). Given the function of *it may be the case that* in (34) to construe objective modality, it can be argued that the embedded *that*-clause can be upgraded into a hypotactic clause. Compare:

(34b) While these buildings were not occupied simultaneously, the evidence suggests that these were in use over a long period of time (Scott 1947: 16) and so are likely to have been at least partly contemporary with each other.

As illustrated by (34b), dropping the relational clause *it may be the case* does not cause any significant change in meaning except that (34) is associated with an additional element of objective modality. Consequently, topical continuity is disturbed in (34), whereas in (34b) the topical Theme equivalence between initial *while*-clause and the subsequent main clause is maintained.

As mentioned earlier, topical Theme equivalence serves as one of the distinguishing features of the concessive use of *while*. The anticipatory *it* as exemplified by (34)

seems to give rise to topic discontinuity. However, as illustrated above, the primary function of *it* is to construe objective modality in a relational or impersonal mental clause or verbal clause (Halliday & Matthiessen, 2004). The linguistic resources including projecting, concession and the modal Finite *may*, function to bring in other voices and enable the negotiation between voices (Martin & Rose, 2007). An example involving a combination of these resources is given below.

(35) Historians have suggested that **while** it may be true that many members of the American movement distanced themselves from German racial hygiene during the 1930s, some key figures remained resolutely supportive. (BAWE-E)

See Figure 6.12 below for the analysis of example (35) from a 'multifaceted view of clause complexing' (Matthiessen, 2002), taking into account types of tactic and logico-semantic relations in the logical metafunction, thematic structure in the textual metafunction and modality in the interpersonal metafunction.

Taxis logico-	and	α		'β		
semantic relation				×β	α	
relation		Historians h	ave suggested	that while it may be true [[that many members of the American movement distanced themselves from German racial hygiene during the 1930s]],	some key figures remained resolutely supportive.	
Theme/Rhe	eme	Historians	have suggested	Theme	Rheme	
		Topical Theme	Rheme			

Figure 6.12 A multifaceted analysis of example (35)

Here the projecting clause *Historians have suggested* functions to attribute the modal assessment conveyed in the projected clause to the topical Theme, namely *historians*. The relational clause *it may be true* serves as metaphorical realization of objective modality. Consequently the proportional content of *while*-clause is characterized by weakened commitment, whereas the main clause is asserted.

# Chapter 7 Analysis of *however*: Clause Position and Its Implications

As mentioned in Chapter 4, Section 4.1, in sharp contrast to the significant overuse of *but* by Chinese EFL learners as compared with their native-speaker counterparts, the conjunctive Adjunct *however* is nevertheless underused by Chinese EFL learners. This is partly attributable to the heavy reliance on the paratactic conjunction *but* to mark contrast and concession to the extent that all the other conjunctive items are selected much less frequently.

This chapter discusses the use of *however* in CLEC and BAWE-E in various syntactic positions to shed light on the types of logico-semantic relations it encodes.

#### 7.1 Positional distribution of however in CLEC and BAWE-E

Unlike the conjunction *but*, which is structurally fixed at the beginning of the clause it introduces, the conjunctive Adjunct *however* can occupy different positions in the clause. As Halliday and Matthiessen (2004) note, while structural conjunctions always occur in the initial position of a clause, or are "inherently thematic", conjunctive Adjuncts can be moved about in a clause and so are "characteristically thematic" (p. 83). The position they take in a clause can make difference to its meaning. The discussion in this section will show that while *however* can be used to encode both adversative and concessive relations, the distinctions can be explored in relation to the syntactic positions and co-occurrence patterns frequently associated with the conjunctive Adjunct.

The conjunctive Adjunct *however* is associated with three syntactic positions: clause-initial, clause-medial and clause-final in both corpora. The proportional positional distributions of *however* in CLEC and BAWE-E are presented in Table 7.1, below.

Table 7.1 Positional distributions of however in CLEC and BAWE-E

Corpus	Clause-initial	Clause-medial	Clause- final	Total
CLEC	545 (78.26%)	144 (20.87%)	1 (0.087%)	690
BAWE-E	4159 (66.44%)	2062 (32.94%)	39 (0.62%)	6260

As shown in Table 7.1, clause-initial position is the most common position for however, accounting for 78.27% and 66.44% in CLEC and BAWE-E respectively. Clause-medial position accounts for the second highest proportion of occurrences of however and clause-final position is used least frequently in both corpora. However, despite the consistency in this general distributional pattern of however found in CLEC and BAWE-E, the BAWE-E corpus shows a higher proportion of clause-medial however (32.94%) than CLEC (20.87%). Medial position however can be preceded by a variety of clause elements and even finite clauses. Before proceeding to a discussion of medial however and the functions associated with it, I will first examine cases of clause-initial however in both corpora.

### 7.2 Analysis of clause-initial however

As mentioned above, clause-initial position represents the unmarked position of however in both corpora. Clause-initial however functioning as textual Theme is related to the preceding discourse by cohesion. As noted by Biber et al. (1999), initial position of linking adverbials (conjunctive Adjuncts) function to mark the connection between units of discourse at the point when the connection is made. In addition, the more interesting question is what the scope of the connection is — both backward and forward. This question will be explored in Chapter 9, Section 9.4 on RST analysis. The types of connection or logico-semantic relations marked by clause-initial however can be either adversative or concessive. Adversative relation means "X and conversely Y" (Halliday & Matthiessen, 2004, p. 405). The adversative relation corresponds to the contrastive type identified by Halliday and Hasan (1976).

According to them, the contrastive type of *however* is synonymous with *on the other* hand and at the same time but distinct from *nevertheless*, which encodes the concessive relation and cannot be used in the adversative sense.

#### 7.2.1 Clause-initial *however* for adversative extension

Example (1) below illustrates the use of clause-initial *however* marking adversative relation in BAWE-E.

(1) Ironically, Hetty seems to fulfill her Rousseauian female role, she is the quintessential rural beauty who is subservient to males. However, she wants to deny her family in pursuit of elevating her status. (BAWE-E)

In (1), the clause-initial however encodes the adversative relation, which is the additive type of extension according to Halliday and Matthiessen's (2004) classification. Unlike concessive relation, which is a type of enhancement, the adversative relation is more closely linked to addition than is the concessive relation. In this sense, it means 'she is the quintessential rural beauty who is subservient to males, and conversely she wants to deny her family in pursuit of elevating her status'. The propositional content of the clause complex introduced by however, which conveys negative evaluation of Hetty, is simply added to the piece of information conveyed by the preceding clause complex, which comparatively speaking is more positive. As indicated by the lexical semantic contrast between 'subservient to males' and 'to deny her family', Hetty's different attitudes towards males and her family are not in logical opposition but in simple direct contrast. Although admittedly, a concessive interpretation of however in the sense of 'in spite of the fact that she is subservient to males, she denies her family' is not completely impossible, the direct lexical contrast seems to favor the adversative sense of however. Another piece of evidence supporting the adversative interpretation of however is the use of the clause-initial comment Adjunct 'ironically', which functions to express the writer's

attitude or stance on the contrast conveyed by the ensuing clause complexes. The contrast is perceived as being ironic. Note that although the thematic status of the clause-initial *ironically* is restricted to the clause complex before *however*, the inherent meaning of *ironic* requires a sense of contrast supplied by information conveyed in the clause complex introduced by *however*, which serves to introduce into the discourse the second part of the contrast.

The adversative use of *however* in (1) can be replaced by conjunctive Adjuncts such as *on the other hand*, *in contrast*, or *at the same time* with a similar adversative sense. However, a comparison of (1a) and (1b) below reveals that replacing *however* with *nevertheless* would be a less preferred choice than replacing it with *in contrast*, which can be argued to be evidence of the adversative sense of *however*.

- (1a) Ironically, Hetty seems to fulfill her Rousseauian female role, she is the quintessential rural beauty who is subservient to males. In contrast, she wants to deny her family in pursuit of elevating her status.
- (1b) Ironically, Hetty seems to fulfill her Rousseauian female role, she is the quintessential rural beauty who is subservient to males. Nevertheless, she wants to deny her family in pursuit of elevating her status.

Apart from being synonymous with *on the other hand* and *in contrast*, the adversative use of *however* is also a functional equivalent of *but*, as illustrated by (1c) below.

(1c) Ironically, Hetty seems to fulfill her Rousseauian female role, she is the quintessential rural beauty who is subservient to males, but she wants to deny her family in pursuit of elevating her status.

By using the paratactic conjunction but, the comparison and contrast in (1c) is restricted to the clause complex. A consequence of this is that the clause-initial comment Adjunct ironically has a scope over the whole clause complex meaning that the contrast between her attitudes towards males and her family is ironic. In contrast, as discussed above, the thematic status of ironically in (1) does not extend beyond the clause complex containing the clause-initial however. The thematic status of the clause-initial comment Adjunct ironically can thus suggests that (1c) is more grammatically integrated than (1). As suggested by Halliday and Matthiessen (2004), clause complexes realized by structural conjunctions are characterized by a higher degree of grammatical integration than cohesive sequences marked by conjunctive Adjuncts. Closely related to the difference with respect to grammatical integration, however is different from but in that however occurs as a separate tone group and is associated with intonational prominence (Halliday & Hasan, 1976; Halliday & Matthiessen, 2004). For this reason, the adversative relation encoded by however is 'emphatic' whereas but is 'simple' (Halliday & Hasan, 1976). However, despite the difference in structural realization, the two express very similar adversative sense meaning "X and conversely Y" (Halliday & Matthiessen, 2004, p. 405).

Similar uses of clause-initial *however* for the adversative relation are also found in CLEC. For instance:

(2) Because I'm an outer-type person, changing work sometimes to improve myself is my choice. However, I'm against those people who change their work only to enjoy themselves not to do it well. (CLEC)

In this example, the writer clearly intends a direct semantic contrast between two situations, i.e. to change work sometimes to improve oneself, of which the writer approves and to change work to enjoy themselves, which the writer explicitly opposes to. The two situations accompanied by the writer's attitudes are expressed in

the way that one should be interpreted as being the converse of the other. The adversative sense or direct contrast signaled by *however* becomes more apparent if (2) is restructured, as illustrated by (2a) below.

(2a) Because I'm an outer-type person, I choose to change work sometimes to improve myself. However, I'm against those people who change their work only to enjoy themselves not to do it well. (CLEC)

In the revised version, the contrast between the writer's attitudes towards the contrasting situations is highlighted with the parallel structure of 'I choose to' and 'I'm against'. Note that as is often the case, the interpretation of adversative or concessive conjunctions in Chinese EFL learners' writing poses difficulty for readers due to the structural deficiency of the clause complexes associated with the relation.

As discussed above, the adversative sense of *however* is synonymous with *in contrast* and *on the other hand*, and can be paraphrased with a *but*-clause. This rule is applicable to the clause-initial *however* in (2). Compare:

- (2b) Because I'm an outer-type person, I choose to change work sometimes to improve myself. On the other hand, I'm against those people who change their work only to enjoy themselves not to do it well.
- (2c) Because I'm an outer-type person, I choose to change work sometimes to improve myself, but I'm against those people who change their work only to enjoy themselves not to do it well.

As illustrated by the pair of agnate patterns above, the contrast between two alternative choices for changing work accompanied by the writer's attitudes is very similar. However, as discussed above, the adversative sense encoded by *on the other hand* in (2b) is more similar to *however* in (2) than to *but* in (2c), as both *on the other hand* and *however* are conjunctive Adjuncts which realize conjunctive relations in

cohesive sequences. The use of *but* in (2c) as a functional equivalent of *however* represents a 'grammatical downgrade' from cohesive sequence to clause complex (Halliday & Matthiessen, 2004). Closely related to this grammatical downgrade is the loss of the emphatic adversative sense encoded by clause-initial *however*.

#### 7.2.2 Clause-initial *however* used for concessive enhancement

In addition to the adversative sense, clause-initial *however* can encode the concessive relation with the sense of *although*. The concessive *however* is used to convey a logical opposition between the clause complex containing the conjunctive Adjunct and the previous discourse. Unlike the adversative sense of *however* focusing on the explicit direct semantic contrast between the clause complexes associated with the relation, the concessive use of *however* depends upon the inconsistency between the pragmatic assumption drawn from the preceding clause complex and the propositional content of the one containing *however*. As Halliday and Matthiessen (2004) suggest, concessive clauses marked by conjunctive Adjuncts such as *however*, *yet*, *nevertheless* are agnate with the hypotactic nexus bonded by *although*.

Both the native-speaker corpus and the learner corpus yield similar uses of clause-initial *however* in the sense of *although*. For instance:

(3) After 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship between Hong Kong and China. However the principles did not operate without flaws and controversies. (BAWE-E)

The clause-initial *however* in (3) encodes the concessive relation, which means 'contrary to the intended effect of the principle of *One country*, *Two Systems*, the principle operates with flaws and controversies, which is surprising'. As discussed above, the concessive *however* can be replaced by *nevertheless*, but not by *in* 

*contrast* or *on the other hand*. This point can be illustrated by the set of examples below:

(3a) After 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship between Hong Kong and China. Nevertheless, the principles did not operate without flaws and controversies.

(3b) After 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship between Hong Kong and China. On the other hand, the principles did not operate without flaws and controversies.

Clearly, the context in (3b) shows that *on the other hand* is unacceptable, or at least less preferable than *nevertheless* in (3a).

Similar to the adversative sense of *however*, the concessive *however* can also be paraphrased by a *but*-clause, as shown by (3c) below.

(3c) After 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship between Hong Kong and China, but the principles did not operate without flaws and controversies.

The concessive relation in (3c) is marked by the paratactic conjunction *but* in the sense of *although*. Thus, alternatively, the concession can be realized by the hypotactic conjunction *although*, as illustrated by (3d) below.

(3d) Although after 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship

between Hong Kong and China, the principles did not operate without flaws and controversies.

In (3d), the initial *although*-clause enhances the main clause by reference to concession. That is, the propositional content of the main clause is contrary to expectation given the content of the initial *although*-clause. However, it should be noted that, the concessive use of *however* as in (3d) cannot be paraphrased by the final *although*-clause. The unacceptability of final *although*-clause is illustrated by (3e) below.

(3e) The principles did not operate without flaws and controversies, although after 1997, the colonial regime was gone and the unprecedented principle of "One Country, Two Systems" was in place to deal with the relationship between Hong Kong and China.

In (3e), the *although*-clause does not constitute a logical opposition to the preceding main clause. (3e) is unacceptable because the final *although*-clause cannot serve as background information necessary for the expected result of the principle, without which the concession cannot be established. For a detailed discussion of initial and final *while*-clauses, see Chapter 6, Section 6. 2.

Example (4) below illustrates the use of clause-initial *however* for concession in the CLEC corpus.

(4) In recent years, advocators of Euthanasia in China have made very effort to make Chinese people accept it and try to legalize it too. However they meet greater difficulties than their counterparts abroad because of the unique culture, ethics, and religion. (CLEC)

Before discussing the function of clause-initial *however* in (4), it needs to be pointed out that it represents the untypical use of *however*. It is untypical in that it is not separated from the rest of the clause by a comma but integrated into the clause. Indeed, more than 90% of clause-initial *however* in BAWE-E and CLEC are separated by a comma from the rest of the clause, which correspond to the typical use of the conjunctive Adjunct, as a separate tone group (Halliday & Hasan, 1976).

The clause-initial *however* in (4) can be interpreted as signaling the concessive relation in the sense of *although*. That is, although efforts are made to make people accept euthanasia and legalize it in China, difficulties still exist for cultural and religion reasons. Since "effort" normally leads to "success" whereas "difficulties" implies "nonsuccess", the expectation of "success" arising from the clause complex preceding *however* is denied by the propositional content of the clause complex containing *however*. In other words, the reason or cause for expecting the result is admitted, but the opposite is taking place. As Halliday and Matthiessen (2004) state, concession can be interpreted as 'frustrated cause'. The sense of frustrated cause, of course, can be realized by an initial *although*-clause, as discussed above. In addition, it may also be realized by circumstantial Adjunct *in spite of*, as illustrated by (4a) below.

(4a) In spite of the efforts to make Chinese people accept euthanasia and legalize it in China, advocators of euthanasia in China meet greater difficulties than their counterparts abroad because of the unique culture, ethics, and religion.

The prepositional group *in spite of* in (4a) encodes a similar concessive sense as initial *although*-clause and clause-initial *however* in (4). They are different in terms of 'metafunction' (Halliday & Matthiessen, 2004). The circumstantial Adjunct *in spite of* realizes the relation by 'circumstantial augmentation', *however* by 'conjunctive link' and *although* by 'tactic augmentation' (p. 370). However, despite

the difference in grammatical realization, *although* and *in spite of* can serve as evidence of *however* encoding the concessive sense.

## 7.2.3 Summary of the functions of clause-initial however

Both the learner corpus and the native-speaker corpus show similar preference for clause-initial however. Clause-initial however functions as textual Theme marking textual transitions between clauses that are not structurally related. The semantic relation encoded by clause-initial however may be either adversative or concessive. The differences have been discussed by exploring the close agnates associated with each relation. Clause-initial however encoding the adversative and concessive relation is synonymous with other conjunctive Adjuncts of the same grammatical rank, i.e. by cohesive sequence. For instance, the adversative sense of however is synonymous with in contrast and on the other hand, whereas its concessive sense is synonymous with nevertheless. Following the line of grammatical integration (Halliday & Matthiessen, 2004), adversative or concessive relation encoded by clause-initial however can be downgraded first to paratactic or hypotactic relations within a clause complex and then further downgraded to circumstance within a single clause. The adversative sense favors paratactic conjunction but as a substitute, whereas the concessive sense can be paraphrased by an initial hypotactic althoughclause or a circumstantial Adjunct in spite of. The group of conjunctive items serving as functional equivalents of clause-initial however encoding adversative or concessive relation are not interchangeable, and thus providing reliable evidence of favoring one type of relation instead of the other.

The discussion in this section also shows that the two groups of writers do not seem to differ greatly with respect to the use of clause-initial *however*. But the exploration of different systemically related alternatives in this section proves effective in analyzing *however* as a multivalent conjunctive. Indeed, without a close examination

of these possibilities, a solid conclusion about similarities or differences in the use of clause-initial *however* by two groups of writers cannot be reached.

## 7.3 Analysis of clause-medial and paratactic however

One of the most apparent differences between clause-initial and clause-medial however, of course, lies in the position the conjunctive Adjunct occupies in a clause. It is assumed that functional differences may emerge after discussing the syntactic differences. Unlike clause-initial however which always serves as textual Theme in a clause, clause-medial however is characterized by its non-thematic status. For instance, however can be placed after an initial Subject serving as topical Theme and thus be given non-thematic status. The position of however after an initial Subject, of course, is not the only possibility. Two variants of clause-medial however are found to be particularly common in both corpora: i) after an initial Subject, as in examples (5) and (6); ii) after an initial circumstantial Adjunct, as in examples (7) and (8). In addition, it is worth nothing that the use of *however* after an initial finite clause is also frequently found in both corpora, as exemplified by (9) and (10). These instances of however are still thematic, and thus, strictly speaking, they do not belong to the discussion of clause-medial however. However, the point is that instances of however after an initial finite clause are characterized by the same orthographic feature of an initial lowercase as medial-position however, which distinguishes them from clause-initial however discussed in the previous section.

- (5) A great benefit, however, is I would not need to adapt the materials in Cutting Edge as much as in Reward. (BAWE-E)
- (6) Pain and fatigue, however, made us too exhausted to think of its serious consequences. (CLEC)
- (7) By the 1930s, however, Borges came to reject Martà n Fierro's nativistic idea of argentinidad as well as the avant-garde as 'infantile disorders. (BAWE-E)
- (8) Decades later, however, Chinese women haven't yet own [vp9,2-] half of the sky.

(CLEC)

- (9) Love played little part in the arrangement of marriages, however a strong loyalty to the husband should be present. (BAWE-E)
- (10) The general meaning of patriotism is the same, however, the definition of it in different eras varies. (CLEC)

The distribution of the variants of clause-medial and paratactic *however* is identified on the basis of two randomly selected samples, each consisting of 100 concordance lines of medial *however* from BAWE-E and CLEC, respectively. The distribution of the variants of clause-medial *however* and the paratactic *however* in the samples is shown in Table 7.2 below.

Table 7.2 Distributions of clause-medial and paratactic *however* in CLEC and BAWE-E (N=100)

Clause-medial however	CLEC	BAWE-E
after initial Subject	13	25
after initial circumstantial Adjunct	6	10
after initial Subject + Finite	0	4
between verb and that-clause	0	6
error tags	22	N/A
Paratactic however	36	33
after initial finite clause		
TOATAL	100	100

As can be seen from Table 7.2, more than 30% of *however* are found after an initial finite clause in the samples from both corpora, which outnumbers any other elements. Next in order of frequency is initial subject, with 13% and 25% of the occurrences in CLEC and BAWE-E, respectively. Initial circumstantial Adjuncts are also found before *however* in both corpora, but they are much less frequent than the other two variants. In addition, it is interesting to note that 'error' is included as one of the variants of clause-medial *however* in CLEC, with 22 occurrences. As mentioned, the CLEC corpus is error-tagged and although the error-tagging schemes are found to be inconsistent and unreliable, some of the tagged errors especially those concerning

conjunctions are still relevant for the present study. The errors associated with clause-medial *however* in CLEC can be illustrated by examples given below.

- (11) In fact, however [wd5,2-], the fresh water [cc2,s-] is serious [wd2,-1] short. (CLEC)
- (12) Advertisement has its advantages and disadvantages, [sn9,-] however [fm3,-], it does play an important role in our lives. (CLEC)

The clause-medial *however* in (11) is tagged as an error, but the tag [wd5,2-] fails to clarify the nature of the error, that is, about the combination of in fact and however. Example (12) represents a different type of 'error' of however. The error tag [sn9,-] indicates that the free clause (not structurally linked or bind to any adjacent clause) is incomplete without a period and the error tag [fm3,-] indicates however is used in its wrong form as opposed to the correct form, spelled with an initial uppercase. However, it is interesting to note that the use of however as a paratactic conjunction exemplified by (12) is tagged as an error in CLEC not always but sometimes. As mentioned, 22 occurrences of however after an initial finite clause are not tagged as errors and are treated as the paratactic use of the conjunctive Adjunct. The paratactic use of however will be further explored later in this section.

The variants of clause-medial *however* and paratactic *however* and their distribution tested on the two random samples of the corpora seem to differ from Biber et al. (1999, p. 892), who note that post-subject position is the most common medial position for *however*. Other medial positions such as those immediately following an operator, between a verb and complement clause are not discussed. In addition, they do not mention instances of *however* after an initial finite clause. As discussed above, one possible explanation for this is that, *however* is typically used as a conjunctive Adjunct to signal relations beyond clause complex and the paratactic use of *however* may be treated as an error. Consequently, professional writers may avoid using

paratactic *however* in writing. However, without wanting to claim that paratactic *however* is wrong, I feel that paratactic *however*, which occurs frequently both in CLEC and in BAWE-E, have functions different from its use in other syntactic positions. See section 7.3.3.

To explore the factors that influence the placement of *however* in the variant of clause-medial positions identified above and their relevance for the types of logico-semantic relations encoded by the conjunctive, I will discuss some of the examples from the samples in the two subsections below, i.e. Sections 7.3.1 and 7.3.2.

## 7.3.1 Functions of post-subject *however*

The first type of medial position however to be examined is the use of however in post-subject position. Several points need to be noted regarding post-subject however. First, in post-subject position, the thematic status of however is not retained. As mentioned, the clause-initial however serves as textual Theme in a clause, marking textual transition between messages (Halliday & Matthiessen, 2004). Removed from initial position, post-subject however falls within the Rheme of the clause, which is not given textual prominence. As suggested by Halliday and Matthiessen, it is the Theme of a clause that is given textual prominence. In the case of post-subject however, the initial Subject corresponding to topical Theme is given prominence. In other words, the initial Subject before however is highlighted. The highlighted information, in the form of topical Theme is prominent in that it orients the reader to the rest of the clause. Thus, in terms of thematic structure, the clause complex containing however is divided into two parts, i.e. Theme corresponding to the initial Subject and Rheme corresponding to the rest of the clause including however. However, as however typically occurs as an element detached from the rest of the clause, a clause containing post-subject however seems to fall into three parts, or three tone units (Halliday & Hasan 1976; Halliday & Matthiessen 2004). The post-subject however is separated from the initial subject and the rest of clause as a separate tone unit, but at the same time, it is more closely related to the latter by the same textual status they share, i.e. Rheme.

Example (5) illustrating the use of post-subject *however* is repeated below.

(5) A great benefit, however, is I would not need to adapt the materials in Cutting Edge as much as in Reward. (BAWE-E)

Clearly, the post-subject *however* in (5) is separated from the initial subject *a great benefit* and the rest of the clause. As discussed above, post-subject *however* mainly serves to highlight the initial Subject, which gains textual prominence as topical Theme. However, although the textual prominence of Subject is still retained after the clause-initial *however* as textual Theme, as illustrated by (5a) below, the point is that by placing *however* after an initial Subject, the emphatic force of *however* is reduced. Compare:

(5a) However, a great benefit is I would not need to adapt the materials in Cutting Edge as much as in Reward.

In other words, while the clause-initial thematic *however* emphasizes that the rest of the clause is to be interpreted as a contrast or concession to the preceding discourse, the post-subject *however* does not serve this function. The alternative choice of post-subject *however* is preferred in some contexts such as (5) for textual reasons. This leads to the second point to note regarding post-subject *however*, that is, the textual factors a writer takes into account in foregrounding the Subject by placing it before *however*.

As a general rule, a clause as a message is organized in the order of given information + new information. Topical Theme in initial position typically conveys given information (Halliday & Matthiessen, 2004). However, the principle of given information first does not seem to apply to post-subject *however*. For instance, the

preceding discourse of (5), quoted below (in brackets) suggests that the initial Subject before *however* contains information that is not previously given.

(5b) A slight disadvantage in Cutting Edge is the length and complexity of the lesson (9 pages). A great benefit, however, is I would not need to adapt the materials in Cutting Edge as much as in Reward. (BAWE-E)

The new information provided by the initial Subject a great benefit is introduced into the discourse as a contrast with its counterpart a slight disadvantage in Cutting Edge in the preceding clause complex. The initial Subject thus serves as an important signal to the reader that the rest of the clause is about a different Subject, a great benefit of Cutting Edge, which involves an element of contrast. The content of the contrast is expressed by the rest of the clause after however, i.e. is I would not need to adapt the materials in Cutting Edge as much as in Reward. A relevant point here is that it is possible for the sequence of topical Theme and Rheme in (5) to be reversed without leading to any significant change in meaning, as shown by (5c) below.

(5c) The fact that I would not need to adapt the materials in Cutting Edge, however, is a great benefit of Cutting Edge.

In (5c), Theme equals Rheme and hence the possibility of reversing the order of the two. This is technically known as 'thematic equative' (Halliday & Matthiessen, 2004, p. 69). However, as Theme in (5c), the fact that I would not need to adapt the materials in Cutting Edge, does not provide a contrast with the preceding discourse, the sequence of Theme and Rheme in the original version is better suited to the context for the purpose of contrasting the advantage and disadvantage of Cutting Edge.

It can thus be said that the Subject is not placed before *however* randomly. In cases like (5c), when the initial Subject does not provide contrast with the preceding

discourse or when it is not previously given, the choice of post-subject *however* would be awkward. Regarding the conjunctive semantic relation, the contrast corresponds to the adversative sense meaning 'X and conversely Y' (Halliday & Matthiessen, 2004, p. 405), which can be paraphrased by *on the other hand* and *in contrast*, but not by *nevertheless* or *yet*.

As discussed above, the initial Subject before *however* tends to provide new information, but it does not necessarily constitute a contrastive pair with something mentioned in the preceding discourse. In cases like (13) below, the initial Subject before *however* serves as a signal of thematic change in the discourse.

(13) Thus far, discussion has centered on technologies which have the capacity to redefine our notions of human life and the human body. Genetics and IVF, for example, can intervene in the creation of life, whereas transplantations and implantations modify existing bodies. A further area of medical technologies, however, concern the ending of lives, and the way in which death is reconfigured through the use of highly sophisticated equipment. (BAWE-E)

The post-subject however in (13) serves to highlight the initial Subject a further area of medical technologies as a new topical Theme that deserves attention. In other words, the post-subject however severs to mark off the Subject/Theme as a potential information unit in its own right. This new topical Theme is not presented as a contrast with something mentioned in the preceding discourse, and thus however in (13) cannot be paraphrased by in contrast, which denotes an explicit contrast between entities in the real world. Note that although the initial Subject before however does not indicate a direct contrast, a weak contrast is still involved in the topic-shift function of post-subject however. In (13), the contrast is indicated by the propositional content of the rest of the clause, especially by the ending of lives, which is a contrast to the creation of life in the preceding text. Therefore, the post-subject however in (13) is presumably motivated by the dual needs of the writer to signal a new topical Theme

and the contrast illustrated by the Rheme of the clause.

Till now, I have explored the textual motivations for choosing post-subject *however* as an alternative to clause-initial *however* and suggested that post-subject *however* is mainly used to highlight the initial Subject as a contrastive entity with something mentioned in the preceding discourse. The semantic relation is that of the adversative type of extension. This, of course, is not the only factor that motivates the use of post-subject *however* and I will return to this issue with further examples later. However, at this stage I need to note that this factor does not seem to account for Chinese EFL writers' choice of *however* in post-subject position.

As mentioned, post-subject *however* is found in the CLEC sample with a lower proportion (13 /100 instances) as compared to BAWE-E (25/100 occurrences). Among these instances of post-subject *however*, only one instance is associated with the contrastive topic which forms a contrast with the information in the preceding clause complex. See example (14) below.

(14) Through this we can see that the developing countries' people [np4,1-1] life had become longer. The baby's infant mortality, however, had decreased from 200 deaths per 1,000 births to 100 deaths per 1,000 births during [wd3,-3] the same time. (CLEC)

In (14), the initial Subject *the baby's infant mortality* is introduced into the text to form a contrastive pair with *people life* (meaning life expectancy) in the preceding clause complex, as indicated by the direct semantic opposition between *had decreased* and *had become longer*. The clause complex containing post-subject *however* could thus be paraphrased with conjunctive Adjuncts in post-subject position which encode adversative sense, as illustrated by (14a) and (14b) below.

(14a) Through this we can see that the developing countries' people [np4,1-1] life had

become longer. The baby's infant mortality, on the other hand, had decreased from 200 deaths per 1,000 births to 100 deaths per 1,000 births during [wd3,-3] the same time.

(14b) Through this we can see that the developing countries' people [np4,1-1] life had become longer. The baby's infant mortality, in contrast, had decreased from 200 deaths per 1,000 births to 100 deaths per 1,000 births during [wd3,-3] the same time.

The remaining instances of post-subject *however* in CLEC that do not function to highlight the initial Subject as a contrast seem to have two features in common: i) the initial Subject before *however* provides information previously given; ii) the conjunctive semantic relation encoded by *however* is that of concession. For instance:

(15) Further more [fm2,-], students are required to wear uniform at least 3 ays [fm1,-]a week. Even in [wd7,2-2] oozen[fm1,-] winter mornings, girls have to wear their uniform of western-style dresses. Those who violate the rules would be criticized openly. This phenomenon however has never happened in the Attached School. (CLEC)

In (15), the initial subject before *however*, *this phenomenon* refers back to the propositions conveyed by three adjacent clause complexes in the preceding text. It thus represents Given information. The thematic prominence given to the initial Subject before *however* thus does not serve to highlight the initial Subject as a contrast with a counterpart in the preceding discourse, but to signal that the rest of the clause carries information about the same topic. The post-subject *however* functions to convey a sense of concession, which is agnate with hypotactic *although*-clause, as illustrated by (15a).

(15a) Further more [fm2,-], although students are required to wear uniform at least 3 ays [fm1,-] a week, this phenomenon has never happened in the attached schools.

Note that the paraphrase also leads to a degree of information loss, since concessive relation encoded by hypotactic conjunction *although* seems to be fairly local as compared to the one encoded by the conjunctive Adjunct *however*, which has an extended scope.

On the other hand, if we consider the contrast between what happened in attached schools and the phenomenon described in the preceding discourse, (15) can be given an adversative interpretation, which is characterized by direct contrast or opposition between two entities. Therefore, *the attached schools* instead of *this phenomenon* would be a better choice for the initial Subject, if an adversative interpretation were intended. Furthermore, *the attached school* as initial Subject also allows for a substitution of *however* by *on the other hand*, which adds further evidence to the adversative interpretation. See (15b) and (15c) below.

(15b) Further more [fm2,-], students are required to wear uniform at least 3 ays [fm1,-]a week. Even in [wd7,2-2] oozen[fm1,-] winter mornings, girls have to wear their uniform of western-style dresses. Those who violate the rules would be criticized openly. The attached schools, however, do not have strict rules of school uniforms.

(15c) Further more [fm2,-], students are required to wear uniform at least 3 ays [fm1,-]a week. Even in [wd7,2-2] oozen[fm1,-] winter mornings, girls have to wear their uniform of western-style dresses. Those who violate the rules would be criticized openly. The attached schools, on the other hand, do not have strict rules of school uniforms.

However, despite the possibility of two potential interpretations of (15), the choice of *this phenomenon* as initial Subject which conveys given information seems to favor a concessive interpretation.

The example below illustrates the use of post-subject *however* as an unambiguous signal of concessive relation.

(16) After all, she's not at the age of becoming the only hope and support of the family, of tasting the bitterness and hardships of human life [sn2,-]. The misfortune, however, impelled her to grow up. (CLEC)

In (16), the initial Subject before however, the misfortune has been referred to in the previous discourse which is not quoted here due to limitation of space. Interestingly, the clause complex immediately before the post-subject however contains another concessive conjunctive Adjunct after all, which indicates summarization, as well as the truth of what follows (Rudolph 1996, pp. 329-30). The information conceded by after all is again denied by the clause complex introduced by the misfortune. In this way, the initial Subject the misfortune functions to refocus for the reader a previous topic after a brief interruption of concession conveyed by the clause complex introduced by after all. That is, despite the fact that she is too young to become the support of her family and to taste the bitterness of life, the misfortune previously mentioned impelled her to do so. The concessive sense encoded by however in (16) can be evidenced by a paraphrase with an initial although-clause, as illustrated by (16a) below.

(16a) Although she's not at the age of becoming the only hope and support of the family and of tasting the bitterness and hardship of human life, the misfortune impelled her to grow up.

In contrast, the adversative interpretation of *however* (16) in the sense of *in contrast* or *on the other hand* would be awkward.

### 7.3.2 Functions of *however* after an initial circumstantial Adjunct

As mentioned, one of the major types of medial position *however* found in both corpora is the use of *however* after an initial circumstantial Adjunct, as exemplified by (17) and (18) below.

(17) Initially, Borges became part of the capital's avant-garde poetry circle, whose most famous representative was Oliverio Girondo, and his first published poems still breathe the excitement of metropolitan life. By the 1930s, however, Borges came to reject Martà n Fierro's nativistic idea of argentinidad as well as the avant-garde as 'infantile disorders'. (BAWE-E)

(18) Decades ago, chairman Mao, the great leader of Chinese revolution claimed: "Chinese women are half of the sky!" Decades later, however, Chinese women haven't yet own half of the sky (CLEC).

In both (17) and (18), the initial circumstantial Adjuncts of time before *however* function as topical Theme of the clause. The reason that they are chosen as topical Theme seems to be closely related to their function in the clause to signal a contrast. As suggested by Halliday and Matthiessen (2004), the choice of a circumstantial Adjunct as topical theme has to be motivated textually, because normally it is the Subject of the clause that functions as topical Theme. It is clear that the Subjects of the clauses containing *however*, i.e. *Borges* in (17) and *Chinese women* in (18) mark information previously given and thus cannot serve as signals of contrast. In contrast, the initial time Adjuncts in both examples consist of new information which provides important point of departure for the rest of the clause. That is, the rest of the clause is interpreted within the frame provided by the initial time Adjuncts. An interesting feature of the initial time Adjuncts in (17) and (18) is that they both mark a contrast with another time Adjunct in the preceding text, i.e. *initially* in (17) and *decades ago* in (19). Therefore, like initial Subjects before *however*, conjunctive Adjuncts before *however* are thematised for the purpose of contrast. The contrast signaled by the initial

Adjunct is complemented by information conveyed by the rest of the clause, which contains the content of the contrast. It is clear that both are crucial for encoding the contrast and comparison intended by the writer. As Quirk et al. (1985, p. 1372) note, when an initial Adjunct introduces a new setting, an element of contrast may be involved and the clause complex have divided focus, i.e. on the initial Adjunct as well as on the last lexical element. For instance, in (17), the initial Adjuncts *initially* and by the 1930s are given topical prominence, because they are relevant for interpreting the different attitudes of the Subject Borges towards avant-garde. In this way, the initial time Adjuncts and the lexical content conveying his attitude towards avant-garde represent a divided focus of information. Similarly, the initial time Adjuncts decades ago and decades later in (18), together with the corresponding lexical content with regard to women's social status represent crucial information for interpreting the comparison and contrast encoded by (18). Consequently, there is the divided focus on both the initial time Adjuncts framing the contrast within a time frame and the rest of the clause, which supplies the lexical content of the contrast.

In both (17) and (18), the conjunctive Adjunct *however* encodes the adversative relation, which focuses on the contrastive facts applied to different time periods. However, a close examination of (18) reveals that a concessive interpretation is also possible. The concessive interpretation of (18) can be supported by the paraphrase with initial *although*-clause or the initial conjunctive Adjunct *nevertheless*, both of which are prototypical concessive markers.

(18a) Although decades ago, chairman Mao, the great leader of Chinese revolution claimed: "Chinese women are half of the sky!", decades later, Chinese women haven't yet own half of the sky.

(18b) Decades ago, chairman Mao, the great leader of Chinese revolution claimed: "Chinese women are half of the sky!". Nevertheless, decades later, Chinese women haven't yet own half of the sky.

The paraphrases illustrated by (18a) and (18b) above suggest that a concessive interpretation of (18) seems to be even more plausible than an adversative one. This is because the clause complex preceding however in (18) is not parallel to the clause complex containing *however* in terms of its structure and hence the meaning conveyed. It is clear that while the clause complex containing however is devoted to the factual status of Chinese women decades later, the preceding clause complex is construed in the form of a projected voice. That is, in light of what was said by chairman Mao decades ago about the important social role played by Chinese women, it is surprising to know that the opposite is true of Chinese women's social status decades later. Unlike the adversative interpretation of (18) discussed above, the concessive interpretation does not have a divided focus on the initial Adjunct and the lexical content. Instead, there is only one focus on the lexical content haven't yet own half of the sky which is a direct contrast to are half of the sky concerning the same subject Chinese women in the preceding clause complex. In the concessive interpretation, the contrast between the initial time Adjuncts decades later and decades ago is not as crucial as the contrast between the positive and negative statement about Chinese women in the final part of the clause. The clause complex preceding however in (18) is presented as background information in relation to what is conveyed in the clause complex containing however.

The discussion in this section reveals that circumstantial Adjuncts before *however* are thematised for the purpose of contrast. The thematic status of circumstantial Adjuncts is enhanced by *however* immediately following it, which divides the clause into two parts, i.e. the entity of the contrast and the content of the contrast. The two parts are complementary in conveying the adversative sense meaning "X and conversely Y" (Halliday & Matthiessen, 2004, p. 405). An important feature of initial circumstantial Adjunct before *however* is that it forms a contrastive pair with another circumstantial Adjunct in the preceding text. On the other hand, the example from the learner corpus

shows that if the clause complex containing *however* conveys the main point intended by the writer, the contrast between the initial time Adjuncts is more likely to be reduced to highlight the contrast between the lexical content in the final part of the clause and thus a concessive interpretation is more plausible.

#### 7.3.3 The paratactic use of *however*

This section explores the paratactic use of *however*. As mentioned in Section 7.3, the paratactic use of *however* occurs very frequently in both CLEC and BAWE-E, as exemplified by (19) and (20) below.

(19) I think some of these subjects are useful and practical---like Chinese, Study of life, etc., however, some are just compulsory and useless (CLEC)

(20) This has meant some of her views have been criticised, **however** her work is still viewed with high regard and has been the basis for many other linguists. (BAWE-E)

Unlike the use of *however* as a conjunctive Adjunct that may have a fairly global scope as discussed in the previous sections, *however* in the examples above encodes logico-semantic relations between two paratactically related clauses within a clause complex.

It is interesting to note that while it is a generally accepted view that *however* is a conjunctive Adjunct that cannot be used to mark tactic relations within the clause complex, the paratactic *however* as illustrated by (19) and (20) above seems to be an obvious violation of this rule. The question then arises as to the grammaticality of the paratactic use of *however*. Halliday and Matthiessen (2004) argue for a dual function of *however* as a conjunctive Adjunct and structural conjunction. They note that some conjunctive Adjuncts, such as *meanwhile*, *otherwise*, *therefore*, *however*, *nevertheless*, are extending their use in modern spoken English so as to become paratactic structural conjunctions; in this function they are unaccented (p. 413). The paratactic use of

however in written English as illustrated by (19) and (20) above may be explained with reference to the writers' preference for a style more typical of spoken English.

Closely related to the function of *however* as a paratactic conjunction is the types of logico-semantic relations encoded by the conjunction. A close examination of the data reveals that the paratactic *however* can encode both the adversative subtype of extension and the concessive subtype of enhancement. For instance, *however* in (20), repeated below, is best understood to be encoding the concessive subtype of enhancement.

(20) This has meant some of her views have been criticised, however her work is still viewed with high regard and has been the basis for many other linguists. (BAWE-E)

Here, the conjunction *however* is used to mark a paratactic relation of enhancement where the initiating clause, i.e. *This has meant some of her views have been criticized*, enhances the continuing clause, i.e. *however her work is still viewed with high regard and has been the basis for many other linguists* by reference to concession. That is, the clause introduced by *however* which conveys the positive evaluation of her work is surprising in light of the negative evaluation conveyed by the preceding clause. The hypotactic conjunction *although* can serve as a diagnostic for the concessive sense of *however*. The paraphrase of (20) with an initial *although*-clause is illustrated by (20a) below.

(20a) Although this has meant some of her views have been criticised, her work is still viewed with high regard and has been the basis for many other linguists.

Here the initial *although*-clause encodes a similar sense of concession to the paratactic *however* in (20) except that the two clauses in (20a) are no longer of equal status. While *however* encodes the paratactic relation between the clause it introduces and

the preceding clause, *although* marks a hypotactic relation between *although*-clause and the main clause. The hypotactic *although*-clause is introduced into the discourse as background information and is thus less central to the main point intended by the writer, whereas the main clause conveys the main thesis. Therefore, the use of hypotactic *although*-clause serves as a special device for highlighting the propositional content of the dominant clause, which is contrary to the expectation derived from the initial *although*-clause. The unbalanced rhetorical weight achieved by the two clauses is reinforced by their unequal grammatical status.

On the other hand, it should be noted that although the paratactic conjunction *but* is interchangeable with *however* in most cases, the multivalent status of *but* can give rise to the indeterminacy as to the types of logico-semantic relations intended by the writer. In contrast, *although* is a monovalent conjunction encoding the concessive subtype of enhancement, which makes it a useful diagnostic for concessive *however*.

The analysis of (20) shows that when the paratactic *however* encodes the concessive subtype of enhancement, it resembles a hypotactic conjunction *although*. On the other hand, the adversative sense of the paratactic *however* is closer to the paratactic conjunction *but*, though the adversative sense of the paratactic *however* is less common than its concessive use.

In some cases, like (21) below, it is hard to decide whether the paratactic *however* encodes the adversative or the concessive sense.

(21) Love played little part in the arrangement of marriages, however a strong loyalty to the husband should be present. (BAWE-E)

Example (21) is a paratactic sequence of two clauses. The logico-semantic relation can be either the adversative subtype of extension or the concessive subtype of

enhancement. If the adversative sense is intended, the writer is comparing *love* and *strong loyalty to the husband* in terms of their relative importance in the arrangement of marriages. On the other hand, if the concessive sense is intended, the writer is emphasizing the importance of a strong loyalty to the husband conveyed by the clause containing *however*, giving a sense of logical opposition or 'frustrated cause' (Halliday & Matthiessen, 2004). That is, *although love played little part in the arrangement of marriages*, a strong loyalty to the husband should be present.

## 7.4 Analysis of clause-final however

So far, I have discussed the function of clause-initial *however* and the three major variants of medial position *however*. With a much lower frequency, *however* can occur in the final position of a clause in BAWE-E. Clause-final *however* differs from both clause-initial and medial position *however* with respect to the force of contrast. Clause-initial *however* serves as textual Theme of the clause and its primary function is to make explicit the contrast with the preceding text. Medial position *however*, being removed from the textual Theme position, is typically employed to highlight the initial element as an entity of contrast with something in the preceding text. Being further removed from the initial position of the clause, clause-final *however* achieves only a weak cohesive relation between the clause complex containing *however* and the preceding text. As Halliday and Matthiessen (2004) suggest, "conjunctive Adjuncts occur finally only as Afterthought and can never carry the only tonic prominence in the clause" (p. 132). With clause-final *however*, the element of contrast is still retained, but with a weaker force.

On the other hand, an interesting feature of clause-final *however* is that it seems to relate to the subsequent text. As indicated by Rudolph (1996, p. 452), "in final position the connectives often have the double function of relating backwards to the preceding part of the text and forwards to the following."

For instance, (22) below illustrates clause-final *however* in BAWE-E. It needs to be noted that clause-final *however* does not occur in CLEC.

(22) The threat of open source software containing Trojan horses or backdoors is one of the biggest limiting factors for open source adoption. This threat is not actually particularly significant, however. As Mike Curtis pointed out, there is usually such a large body of people examining open source software to identify and provide corrective action that vulnerability wouldn't last long. (BAWE-E)

The clause-final *however* in (22) indicates a concessive relation between the clause complex containing *however* and the preceding clause complex. Since *one of the biggest limiting factors* would normally imply that it is important, saying that *it is not actually particularly significant* is surprising. The concessive sense encoded by the clause-final *however* is similar to the clause-initial *however* as illustrated by (22a) below.

(22a) The threat of open source software containing Trojan horses or backdoors is one of the biggest limiting factors for open source adoption. However, this threat is not actually particularly significant.

However, while clause-initial *however* marks a textual transition from the preceding clause complex, clause-final *however* contains an extra element of anticipating further elaboration of the information presented in the clause. Having established the contrast with the preceding text, the writer may feel it necessary to provide justifications for holding a view contrary to the expectations following the preceding clause complex. As illustrated by the subsequent clause complex following *however* in (22), the reason for denying the significance of the threat is because *there is usually such a large body of people examining open source software to identify and provide corrective action that vulnerability wouldn't last long.* The forward-connecting function of clause-final

however in (22) becomes more obvious if the order of the clause complex ending with however and the subsequent clause complex is exchanged, as illustrated by (22b) below. Indeed, the order can be changed without making any substantive effect on the meaning conveyed by this passage. This can be viewed as an indication of the forward-connecting function of clause-final however.

(22b) The threat of open source software containing Trojan horses or backdoors is one of the biggest limiting factors for open source adoption. However, as Mike Curtis pointed out, there is usually such a large body of people examining open source software to identify and provide corrective action that vulnerability wouldn't last long. Therefore, this threat is not actually particularly significant.

## Chapter 8 Distinguishing between Two Functional Types of *on the*contrary: The Application of Thematic Analysis

On the contrary has been invariably described as an expression of contrast or contradiction by grammar books and dictionaries. Research on contrastive markers further specifies its functional role as that of correction or replacement. For instance, in their discussion of adversative relations as one type of conjunctive relations, Halliday and Hasan (1976) identify the special sense of on the contrary as that of correction, which means 'as against what has been said, one formulation is being rejected in favor of another'. Halliday and Matthiessen (2004) describe on the contrary as a marker encoding the replacive subtype of extension, meaning "not X but Y" (p. 405). Similarly, Fraser (1998) describes on the contrary as a contrastive marker signaling corrective direct contrast between two sentences, where the first sentence constitutes the version of the action or state which is incorrect or inaccurate, in contrast with the second sentence which constitutes an action or state which is correct or accurate. Rudolph (1996) also refers to on the contrary as a marker of correction, emphasizing that negation is an integral part of on the contrary "only if S1 contains a negation, a continuation in S2 is introduced by on the contrary, acting as a marker of correction" (p. 326).

However, the analysis of *on the contrary* in the native-speaker corpus, i.e. BAWE-E reveals that frequently the expression is not used in association with negation in the preceding clause complex and that these instances of *on the contrary* do not express a replacive sense at all. These empirical findings of the corpus analysis suggest that previous accounts of *on the contrary* as a marker signaling replacive (corrective) sense may be inadequate. The analysis in this chapter proposes to distinguish between two functional types of *on the contrary*, i.e. the replacive and the adversative, which differ systemically at the syntactic and semantic levels. The systemic differences are

accounted for by drawing on Theme and Rheme analysis (Halliday & Matthiessen, 2004). Justifications for using this descriptive framework will be provided in Section 8.3.

This chapter is organized as follows: Section 8.1 briefly reviews related works that particularly distinguish *on the contrary* as a corrective marker from other conjunctive Adjuncts signaling adversative sense such as *in contrast* or *on the other hand*. Section 8.2 provides quantitative evidence for the two functional types of *on the contrary*, with a particular focus on the objectivity of the method for obtaining the evidence. Section 8.3 presents the descriptive framework to account for the two types of *on the contrary* in the corpus, followed by the description of replacive and adversative *on the contrary* in two sub-sections, namely Sections 8.3.1 and 8.3.2. Section 8.4 investigates the interconnections between syntactic positions and the functional distinctions of the two types of *on the contrary*. The last section concludes the chapter with a summary of the major findings and implications of the functional differences in British University students' use of *on the contrary* in academic writing.

## 8.1 Descriptions of on the contrary in the literature

As mentioned above in the introduction section, research on adversative markers has generally agreed on the function of *on the contrary* as a corrective marker, which is to be distinguished from other subtypes of adversative markers (Halliday and Hasan, 1976; Halliday and Matthiessen 2004). See Chapter 2 for literature review on different types of logico-semantic relations and CONJUNCTION based on Halliday and Matthiessen (2004). This section, this reviews descriptions of *on the contrary* in English reference grammars and learner's dictionaries, both of which are regarded as important sources of guidance to the usage of words in English.

Studies of English grammar usually provide explicit rules regarding the use of a particular grammatical item. Here, the one particular grammar being referred to for

the use of *on the contrary* is *A Grammar of contemporary English* by Quirk et al. (1972). They describe *on the contrary* as an expression which entails a denial of the validity of what preceded by emphasizing that the opposite is true, while *by comparison*, *by way of contrast* and *by contrast* are used to introduce a comparison or contrast without entailing a denial of validity of what preceded.

In addition to descriptions in English Grammar, learners' dictionaries, such as the *Cambridge Advanced Learner's Dictionary* (2008, p. 304), point out the common mistake by learners in using *on the contrary*: "Use *on the contrary* to show that you think or feel the opposite of what has just been stated. If you are comparing two things and you want to say that the second thing is very different to the first, don't say *on the contrary*, say *by/in contrast*".

These descriptions of *on the contrary*, however, do not constitute the framework for the analysis in this chapter. Instead, as mentioned in the introduction, the analysis starts from a different perspective in terms of what the empirical data has to say about the use of *on the contrary* in the academic writing of British university-level students. The reliance on the corpus data is central to the distinction between the functional types and will be described in the next section.

### 8.2 Quantitative evidence of two functional types of *on the contrary*

As presented in Chapter 2, the data examined in the analysis of *on the contrary* is based on the BAWE-E corpus. The analysis will be carried out both from a quantitative and a qualitative point of view. In order to avoid subjective judgment as far as possible, it is essential to establish a procedure for accounting for the features of *on the contrary* used in the corpus. The procedures are presented as follows:

The first step in the quantitative analysis concerns the overall frequency of *on the* contrary established by using Wordsmith Tools 5.0 (Scott, 2008). The second step is

based on the frequency analysis of negation associated with *on the contrary*. Important quantitative findings which support a distinction between the two functional types of *on the contrary* emerge at this stage. The next step concerns the setting up of the appropriate descriptive framework to account for the different functional types of *on the contrary*. In the final stage, following the descriptive framework established, a qualitative analysis of *on the contrary* is carried out with examples from the corpus.

Overall, the BAWE-E corpus yields 75 instances of *on the contrary*, with a relative frequency of 0.24 per 10,000 words, which indicates that *on the contrary* is not frequently used by British university-level students. See Chapter 4, Section 4.1 for the distribution of adversative, replacive and concessive conjunctions in CLEC and BAWE-E.

The functional types of *on the contrary* can be distinguished in the first stage by following the principle of negation. As suggested in the introduction, at the basis of previous beliefs about *on the contrary* as a corrective conjunctive lies the concept of negation. This section, therefore first investigates the frequency of negation associated with *on the contrary*.

Negation is referred to as negative polarity in Halliday and Matthiessen (2004). The various means to express negative polarity is summarized in "the system of polarity" in Halliday and Matthiessen (2004, p. 23). The system distinguishes between generalized negative and special kind of negative. A generalized negative is realized by *not* or the contracted form n't. A specialized negative is further distinguished according to the clause functions between those functioning as participation (participation includes both Subject and Object in traditional terms) such as *none*, *no* + N, *neither* (+N), *no-one*, *nobody*, *nothing* and those functioning as circumstantiation such as *never*, *nowhere*, *seldom*.

Following Halliday and Matthiessen's (2004) system of polarity, the frequencies of different forms of negation co-occurring with *on the contrary* in two adjacent clause complexes are set out in Table 8.1.

Table 8.1 Frequency of negative polarity associated with on the contrary in BAWE-E

Negative polarity	<b>BAWE-E</b> (3,212,488 tokens)		
	N		
n't	0		
not	22		
no + noun	4		
neither (+ noun)	1		
none	0		
nobody	0		
nothing	1		
nowhere	0		
never	0		
seldom	0		
Total	28		

As can be seen from Table 8.1, only 28 instances (from a total number of 75 instances) of *on the contrary* in the corpus are associated with a preceding negation, most of which are expressed primarily by the generalized type of negation *not*.

By investigating these 28 instances of *on the contrary*, I find that there is a close connection between negative polarity and the function of the conjunctive to encode replacive type of extension. With only two exceptions, all the remaining instances of *on the contrary* in association with a preceding negation are used to express the replacive type of extension. For instance:

(1) Sex is **not** driven underground in modern civilisation. **On the contrary**, it comes to be continually discussed and investigated. (BAWE-E)

On the contrary in (1) signals what is said in the negative form about sex in the preceding clause complex is replaced by what is expressed in the positive form in the clause complex introduced by on the contrary. The replacive function of on the contrary and its association with negative polarity will be explored further in Section 8.3.1.

However, as indicated earlier in this section, the principle of negative polarity, although well-established in previous accounts of the expression, cannot be used as the sole criterion for distinguishing *on the contrary* as a replacive marker. There are exceptional cases such as:

- (2) In other words, the American approach treats abortion as a positive right of autonomy. State regulations are valid only if it does not impose a 'substantial obstacle in the path of a woman seeking an abortion before the foetus attains viability'. On the contrary, the English approach treats abortion as a negative liberty. Access to abortion is allowed only if statutory circumstances are met. It is not contended that the American position should be adopted, but the rights-based approach may be taken as a plausible complementary alternative. (BAWE-E)
- (3) Albright and Ahituv prove that Canaan could **not** have any other significance for Egypt as only the passage to other regions beyond it, therefore due to many internal and external factors its economy, thus city-states, declined (Gonen 1984). **On the contrary**, Kenoyn claims that "by the last years of the Eighteenth Dynasty almost every town for which there is evidence in the Middle Bronze Age was once more flourishing and some had been newly established" (Kenyon 1971, quoted by Gonen 1984). (BAWE-E)

Despite the presence of negative polarity, the two instances of *on the contrary* in (2) and (3) are obviously not used to signal a replacement of what is said in the preceding

clause complex. This is because the *not* negation in these examples is associated with a Subject different from the one of the clause complex introduced by *on the contrary*. In the presence of two different Subjects underlined in the examples above, the conjunctive Adjunct *on the contrary* functions to signal the adversative type of extension.

The remaining 43 instances of *on the contrary* which are not associated with a preceding negation, are used to signal the adversative type of extension. Therefore, a point revealed by the frequency analysis of negation in the corpus is that despite the previous common belief about *on the contrary* being a corrective marker, the conjunctive is more frequently used as a marker signaling the adversative sense in BAWE-E.

The overview of the frequency of *on the contrary* in the corpus, with particular attention paid to the frequency of negation, forms the basis of the distinction between the two functional types to be discussed in detail in the following sections. It has been shown that more than 50% of the instances of *on the contrary* in the corpus are not associated with a preceding negation. This seems contradictory to the descriptions of the expression found in most dictionaries and studies on adversative discourse markers (Halliday & Hasan 1976; Halliday & Matthiessen 2004; Fraser, 1998) which either explicitly or implicitly indicate the principle of negation. However, instead of simply reporting these instances of *on the contrary* as errors, the analysis in this chapter argues for an adversative use of *on the contrary* which represents the dominant usage type of *on the contrary* in the corpus. Differences between replacive and adversative uses of *on the contrary* will be accounted for with the descriptive framework described in the next section.

## 8.3 Descriptive framework for analyzing two functional types of on the contrary

As outlined in the data and methods section, after the frequency analysis of negative

polarity (negation), which sheds light on the distinction between two types of *on the contrary*, the next step concerns the setting up of the appropriate descriptive framework to account for the different functional types.

The starting point of the descriptive framework is to clarify the issue relating to the unit of text to be included in the analysis of *on the contrary*. A label is assigned to each unit so that it can be referred to consistently in the analysis. The framework for describing the two functional types of *on the contrary* is then proposed based on a careful examination of the data.

With respect to the unit to be included in analyzing *on the contrary*, it is important to consider the function of conjunctive Adjuncts. According to Halliday and Matthiessen (2004), conjunctive Adjuncts are textual in function. They state that "they [conjunctive Adjuncts] set up a contextualizing relationship with some other (typically preceding) portion of text ... the conjunctive Adjuncts construct these relationships by cohesion — that is, without creating a structural link in the grammar between the two parts" (p. 132). Halliday and Matthiessen emphasize "their [conjunctive Adjuncts] contribution to cohesion is made by indicating logico-semantic relations that extend beyond the [grammatical] domain of a single clause complex" (p. 539). Following Halliday and Matthiessen's view on the function of conjunctive Adjuncts to indicate textual transitions beyond the domain of a single clause complex (see also Matthiessen, 1992), the analysis of *on the contrary* in this chapter takes into account not only the clause complex in which it occurs but also the preceding text consisting of one clause complex or more. In the descriptive framework, the former will be labeled as I and the latter as II.

Within the clause, the organization of each clause as message is considered and each clause is analyzed individually in terms of its component units. According to Halliday and Matthiessen (2004), two related systems, the system of THEME and the system

of INFORMATION manage the discourse flow below the clause complex. The THEME system, also referred to as thematic structure of a clause in Halliday and Matthiessen (2004), is made up of Theme and Rheme. The Theme is defined as "the element which serves as the point of departure of the message; it is that which locates and orients the clause within its context", whereas Rheme is "the remainder of the message, the part in which the Theme is developed" (p. 64). The Theme and Rheme analysis therefore aims to explore the textual meaning of *on the contrary* both within and beyond the clause complex. This is done by identifying how Theme and Rheme of the clause (clause complex) containing *on the contrary* is linked to Theme and Rheme of a preceding clause complex to mark a semantic relation of contrast.

The concept of Focus, in information structure, is understood to be the Focus within New information, the non-presupposed part of the clause complex or utterance. It is in this sense that Focus complements the concept of Theme, where the Theme/ focus dichotomy refers to the position and information status of discourse elements. In the analysis of the conjunctive Adjunct *on the contrary*, the term Focus is used to refer to one particular discourse element, either within the Theme or Rheme that is highlighted, fore-grounded or simply given more prominence than other elements. Focus is realized in spoken English by tonic prominence.

The following two sections aim to account for the features of two functional types of on the contrary. The Theme and Rheme analysis aims to capture the textual aspect of on the contrary, i.e. how Theme and Rheme of one clause complex containing on the contrary are linked to those of a preceding clause complex in a cohesive sequence. Focus is related to the writer's modulation of information relative to the reader — what he wants to draw the reader's attention to in a given context.

### 8.3.1 The replacive type

Much of the discussion in frequency analysis has focused on negation as a means of

identifying *on the contrary* as a corrective marker, without going into detail of its functions. This section illustrates how negation, combined with other features within the framework of Theme and Rheme, makes it possible for *on the contrary* to function as a corrective marker.

Example (4) illustrates the corrective type of *on the contrary*.

(4) Unfortunate events in world politics should not result in merely a rejection of the possibility for democratic cooperation among states. On the contrary, these events should give us material for reflection on how world politics should be made more democratic. (BAWE-E)

Following the descriptive framework outlined in the previous section, example (4) is analyzed below:

	I	II			
Unfortunate	should not result in	On the	these events	should give us	
events in world	merely a rejection	contrary,		material for	
politics	of the possibility			reflection on	
	for democratic			[[how world	
	cooperation among			politics should be	
	states.			made more	
				democratic]].	
<b>Topical Theme</b>	Rheme	Textual	Topical Theme	Rheme	
		Theme			
			Given	New	

Figure 8.1 Analysis of example (4)

As can be seen from Figure 8.1 above, topical Theme of II *these* refocuses for the reader the content of the preceding clause complex, i.e. *unfortunate events in world politics*. In this way, equivalence between the two topical Themes is established. Because of the equivalence of topical Themes, Theme represents the given information and thus cannot convey any information of contrast. This is because contrast always involves contrary-to-expectation information that the writer intends to draw the reader's attention to, as suggested by Halliday and Hasan (1976).

On the other hand, the equivalence of topical Themes suggests to the reader that Rheme of II involves opposition with Rheme, since the use of *on the contrary* would otherwise be problematic. However, an interesting point revealed by an examination of the Rhemes is that the Rhemes of I and II are in opposition only in syntactic terms, i.e. a negative Rheme as opposed to a positive Rheme. Semantically, the Rhemes are equivalent. Comparing the Rhemes in (4), it is clear that "should not result in merely a rejection of the possibility for democratic cooperation among states" doesn't contradict "should give us material for reflection on how world politics should be made more democratic". By using negation, the negative value of Rheme of I (rejection of democratic cooperation) is reversed and is thus not in opposition with Rheme of II (more democratic).

In (4), the special sense of replacement signaled by *on the contrary* is created by the combination of the denial of the first clause complex plus the assertion of the second clause complex. The effect of negation, expressed explicitly by *not* in I is decisive for conveying the opposition between Rhemes of the two adjacent clause complexes. II, while still maintaining the same topical Theme, does not contradict but further specify what the topical Theme is, which functions to intensify the degree of the negated value contained in the proposition. Looked upon from an interpersonal dimension, the contrast signaled by *on the contrary* indicates the writer's preference towards the reader adopting his or her stance, in view of the background information presented in the negative form in I. The relation signaled by *on the contrary* is thus 'internal' as opposed to 'external' (Halliday & Hasan, 1976). II, introduced by *on the contrary* carries the focus of information. Therefore, given the common topical Theme, Rheme of II represents the Focus.

Although frequently expressed by repetition of the same word or a referent pronoun referring back to the topical Theme1 in I as exemplified by (4) analyzed above, the topical Theme of the clause complex containing *on the contrary* can also be inferred

from the propositional content of the preceding clause complex. For instance:

(5) In these cases the listener is not intending to grab the floor and appear rude. On the contrary, the aim is to provide support and contribute to the construction of the message. (BAWE-E)

	I	II			
The listener	is not intending to grab the floor and appear rude.	On the contrary,	the aim	is [[to provide support    and contribute to the construction of the message]].	
<b>Topical Theme</b>	Rheme	Textual Theme	<b>Topical Theme</b>	Rheme	
			Given	New	

Figure 8.2 Analysis of example (5)

As can be seen from Figure 8.2 above, the topical Theme of II, i.e. *the aim* following *on the contrary* as textual Theme can be referred back to the topical Theme of I, i.e. *the listener* not directly but via some less explicit devices. First, *the aim* is linked to Rheme of I via the grammatical device of a *to*-infinitive which denotes aim. Secondly, it can be inferred from the context that the topical Theme of II, i.e. *the aim* implies the aim of *the listener*, which corresponds to topical Theme of I. Therefore, the topical Theme of II does not convey any contrast and thus is not the Focus of the clause complex introduced by *on the contrary*.

As opposed to the links established between the topical Themes of I and II, their corresponding Rhemes are in opposition. And again, as explained in the analysis of (4), the contrast should not be interpreted semantically. In this example, the negative value conveyed by "grabbing the floor and appearing rude" in Rheme of I is rejected with the explicit negation "not", so that Rheme of I does not contradict the positive value of Rheme of II, i.e. to provide support and contribute to the construction of message. From a communicative point of view, Rheme of II conveys the writer's

point of view about a common topic Theme and is thus highlighted as Focus.

To sum up, it has been shown that the replacive *on the contrary* requires negation expressed in the Rheme of the preceding clause complex. The contrast is found between the positive and negative statement identified as Rhemes which are usually concerned with one common topical Theme. Structurally, explicit negation in the clause complex preceding *on the contrary* contrasts with the clause complex expressed in the positive form following the conjunctive. Semantically, affirmation of the positive (negative) value of the topical Theme complements the rejection of the negative (positive) value. The information Focus corresponds to Rheme of the clause complex containing *on the contrary*, which is also the source of contrast.

## 8.3.2 The adversative type

The earlier discussion of the replacive *on the contrary* has revealed negation to be an essential part of the sense of replacive subtype of extension. In the absence of negation, however, other devices must be used to establish a contrast between the two clause complexes on either side of *on the contrary*. Instead of contrasting the negative and positive forms of the two Rhemes of one common topical Theme, the adversative sense holds when there is a clear opposition between two different topical Themes as relevant alternatives explicitly mentioned and contrasted in the same stretch of discourse. Example (6) exemplifies the use of *on the contrary* to signal explicit contrast between two different topical Themes.

(6) Primates such as red colobus monkeys and chimpanzees prefer old-growth forest areas and so are less able to adapt to habitat change and thus are more vulnerable to hunting (Struhsaker, 1997). On the contrary the cercopithecines tend to be highly adaptable colonists, equipped to survive in a wide variety of habitats, and therefore often escape the limitations of living in a damaged habitat where hunting takes place. (BAWE-E)

It is obvious that *on the contrary* in (6) cannot be given a replacive interpretation due to the absence of explicit negation in the clause complex preceding the conjunctive. Instead, the semantic relation indicated by *on the contrary* depends on the contrast between different topical Themes plus their respective Rhemes. See Figure 8.3 below for the logico-semantic relations and thematic analysis of two adjacent clause complexes of example (6):

I	1			Primates such as red	prefer old-growth forest areas
				colobus monkeys	
				and chimpanzees	
	×2		and so		are less able to adapt to habitat change
	×3		and thus		are more vulnerable to hunting
			textual Theme	topical Theme	Rheme
II	1	α	On the contrary	the cercopithecines	tend to be highly adaptable colonists,
		=			equipped to survive in a wide variety
		β			of habitats
	×2		and therefore		often escape the limitations of living in
					a damaged habitat [[where hunting
					takes place]].
			textual Theme	topical Theme	Rheme

Figure 8.3 Analysis of example (6)

In I, three clauses, represented by 1, 2 and 3 are linked paratactically. The logico-semantic relation between the clauses is that of enhancing, signaled by the structural Themes *and so* and *and thus*. The linear sequence of the clause complex of II breaks down first at the point of the introduction of topical Theme which forms a contrastive pair with topical Theme of the preceding clause complex. The Rhemes in II pick up the corresponding elements in I as the source of comparison and contrast. In this way, a two-fold contrast operates in the adversative context of *on the contrary*. The two-fold contrast provides two pairs of alternatives to be contrasted, i.e. topical Themes and Rhemes. Corresponding to the two-fold contrast, there is a divided Focus on the topical Theme and Rhemes of the clause complex containing *on the contrary*.

To sum up, one formal restriction the adversative *on the contrary* has to obey is that the clause complex introduced by *on the contrary* must have a contrastive topical

Theme. The contrastive topical Theme receives the Focus of information, which is not presupposed or inferred from the preceding clause complex. In this respect, the adversative use of *on the contrary* is exceptional regarding the information structure. As stated by Chafe (1986, p. 26), in English the subjects of clauses usually express given and activated information in terms of the views of both speaker (writer) and the hearer (reader). By contrast, the replacive use of *on the contrary* conforms to this general principle of information structure, since the topical Theme is always required to be the same or anaphorically or by association related to the topical Theme of the preceding clause complex. Therefore, in replacive context, the Focus has to rely on the remainder of the clause complex, i.e. the Rheme, whereas in the case of the adversative *on the contrary*, both the topical Theme and Rheme carry the content of contrast and are thus the Focus of information.

It has been shown that in its replacive function, *on the contrary* requires explicit negation in the preceding clause complex and equivalence of the topical Themes. The Focus of information is on the Rheme of the clause complex introduced by *on the contrary*. In its adversative function, *on the contrary* requires different topical Themes as the first pair of contrast and different Rhemes as the second pair of contrast. Unlike the replacive *on the contrary* with one single Focus, the adversative *on the contrary* is associated with two-fold contrast and hence a divided Focus.

#### 8.4 Further evidence of the functional distinctions of on the contrary

This section investigates the syntactic positions of *on the contrary* and how they are interconnected with different functional types of the conjunctive.

#### **8.4.1** Clause-initial on the contrary

As suggested by Halliday and Matthiessen (2004), conjunctive Adjuncts are characteristically thematic, which typically operate in the clause as part of the Theme. In the case of *on the contrary*, 50 out of 77 instances of *on the contrary* are found to occur in the initial position in BAWE-E. The common initial position can be

understood as the best way to emphasize the contrast of the clause complex introduced by the conjunctive. This is because *on the contrary* in the initial position functions as the textual Theme to signal to the reader the forthcoming contrast. However, as discussed in the previous sections, the contrast signaled by *on the contrary* can fall into two semantic categories, i.e. replacive and adversative. Replacive and adversative *on the contrary* in the initial position are exemplified by (7) and (8), respectively.

(7) As will be shown later in this essay, more recent critics of Dickens do not argue in favour of the association of London with prosperity. On the contrary, they underline the connection of the city with death or hell. (BAWE-E)

In (7), the clause-initial *on the contrary* functions to signal a contrast between the clause complex it introduces and the preceding clause complex. The topical Theme in the second clause complex, i.e., *they*, by being a pronoun, refers back to the topical Theme of the preceding clause complex, i.e., *more recent critics of Dickens*. It is thus obvious that the corresponding Rhemes of the two clause complexes carry the content of the replacement, that is, what *more recent critics of Dickens* believe to be false about London is replaced by what they believe to be true about London. The Focus of information is conveyed by the Rheme of the second clause complex, i.e. *underline the connection of the city with death or hell*. In this manner, the contrast is established between the negative and positive aspects of the same topical Theme. Overall, the second clause complex introduced by *on the contrary* intensifies a denial explicitly expressed by the negation "not" in the preceding clause complex.

In contrast, unlike (7), the second clause complex in (8) does not involve a denial of the proposition made in the first clause complex. Instead, while still having *on the contrary* functioning as textual Theme, the second clause complex focuses on a contrast effected by a different topical Theme, i.e. *on-site pollen data*, which is not

recoverable from any part of the preceding clause complex.

(8) Off-site pollen data is obtained from bogs and lakes at distance from archaeological sites, particularly at upland, northern, and western locations. On the contrary, on-site pollen data is obtained within archaeological soil contexts, although data has the difficulty in interpretation compared to off-site pollen data (Edwards 1998:69-88). (BAWE-E)

## **8.4.2** Non-clause-initial on the contrary

In addition to the predominant initial position discussed above, the corpus yields 27 instances of non-initial position *on the contrary*. The concordance lines of *on the contrary* in the non-initial position are shown in Figure 8.4 below.

```
N Concordance
      from then on has a kind of 'life' of its own. Action, on the contrary, as the Greeks were the first to
     with two much weaker countries, which are allies, on the contrary, China sits in the middle of the Asian
     as Hobbes described, 'men have no pleasure, (but on the contrary a great deale of griefe) in keeping
          Calvinism does not lead to world rejection, but on the contrary to world mastery. Weber explains
 5
       poverty everywhere'. The country's biggest cities, on the contrary, contained every aspect 'that
 6
     to identify any immediate importance. This essay, on the contrary, will argue that China has immediate
 7
         a man mathematically and scientifically exact; on the contrary, it made him think of the work of a
 8
       story more interesting. The other three examples on the contrary, combine the expressive function of
 9
    her love affairs and ends up dead. Gothic heroines, on the contrary, are virtuous even though they may
10
    group as it progressed to the modern era. However, on the contrary, there is a widely held assumption,
              his authority as a physician of culture? If, on the contrary, he does not take his views to be
11
12 remains immobile. The secretary in Phantom Lady, on the contrary, is an active character. Kansas
       own 'supreme principle' of ethics; "Injure no-one; on the contrary, help everyone as much a you can"
13
14
            'supreme principle' of ethics; "Injure no-one; on the contrary, help everyone as much as you can",
15
       own 'supreme principle' of ethics; "Injure no-one; on the contrary, help everyone as much a you can"
        when included among native Egyptian myths or, on the contrary, a useful tool, which orders the
17
      This is in no way unkindness on Nietzsche's part; on the contrary it is a warning, a recommendation for
18
    time its tremendous beauty'. Literature and poetry, on the contrary, became increasingly politicised
19 does not diminish the significance of that role, quite on the contrary, increases its legitimacy and
20
           has not hindered the fiscal deficit reduction - on the contrary, Lula's administration has produced
21
     the general will, and its proper domain. Rousseau, on the contrary, believes in the stabilising role of the
    structural adjustment, however, is not less serious; on the contrary, countries that do not implement
22
23
       a particular society can then be placed. Simmel, on the contrary, insisted that the use of forms must
24
                is the absolute precondition of success; on the contrary, for politicians, the most important
25
        of the 'demigods in lab coats', external success on the contrary, relies on the deliberate construction,
     not at all closely related to Neanderthals, but that on the contrary by about 30,000 years BP an influx
26
     Montaigne is not one to revel in his own self-worth; on the contrary, he often humbles himself as he did
```

Figure 8.4 Concordance lines of non-initial on the contrary

Despite its low frequency (27 non-initial vs. 50 sentence-initial), two major patterns of non-initial *on the contrary* can be distinguished. The most explicit and obvious pattern follows the sequence of "NP ^ *on the contrary* ^ VP", in which NP corresponds to the Subject or topical Theme, whereas *on the contrary* and VP constitute the Rheme of the clause complex. Overall, 9 instances of non-initial *on the contrary* are associated with this pattern, as illustrated by Figure 8.5 below.

#### N Concordance from then on has a kind of 'life' of its own. Action, on the contrary, as the Greeks were the first to 2 with two much weaker countries, which are allies, on the contrary. China sits in the middle of the Asian -as Hobbes described, 'men have no pleasure, (but on the contrary a great deale of griefe) in keeping 4 -Calvinism does not lead to world rejection, but on the contrary to world mastery. Weber explains 5 poverty everywhere'. The country's biggest cities, on the contrary, contained every aspect 'that 6 to identify any immediate importance. This essay, on the contrary, will argue that China has immediate 7 -a man mathematically and scientifically exact; on the contrary, it made him think of the work of a 8 story more interesting. The other three examples on the contrary, combine the expressive function of 9 her love affairs and ends up dead. Gothic heroines, on the contrary, are virtuous even though they may 10 group as it progressed to the modern era. However, on the contrary, there is a widely held assumption, his authority as a physician of culture? If, on the contrary, he does not take his views to be 11 12 remains immobile. The secretary in Phantom Lady, on the contrary, is an active character. Kansas 13 -own 'supreme principle' of ethics; "Injure no one; on the contrary, help everyone as much a you can" 'supreme principle' of ethics; "Injure no one; on the contrary, help everyone as much as you can", 14 15 -own 'supreme principle' of ethics; "Injure no-one; on the contrary, help everyone as much a you can" 16 -when included among native Egyptian myths or, on the contrary, a useful tool, which orders the This is in no way unkindness on Nietzsche's part; on the contrary it is a warning, a recommendation for 17 18 time its tremendous beauty'. Literature and poetry, on the contrary, became increasingly politicised 19 does not diminish the significance of that role, quite on the contrary, increases its legitimacy and 20 has not hindered the fiscal deficit reduction - on the contrary, Lula's administration has produced 21 the general will, and its proper domain. Rousseau, on the contrary, believes in the stabilising role of the 22 -structural adjustment, however, is not less serious; on the contrary, countries that do not implement 23 a particular society can then be placed. Simmel, on the contrary, insisted that the use of forms must 24 is the absolute precondition of success; on the contrary, for politicians, the most important 25 of the 'demigods in lab coats', external success on the contrary, relies on the deliberate construction, 26 not at all closely related to Neanderthals, but that on the contrary by about 30,000 years BP an influx

Figure 8.5 Concordance lines of non-initial on the contrary preceded by Subject

27 -Montaigne is not one to revel in his own self-worth; on the contrary, he often humbles himself as he did

One of the main functions of the post-subject *on the contrary* in this pattern is to highlight the preceding NP in initial position as the item that is being compared to an equivalent item in the preceding clause complex. However, since a conjunctive relation is most commonly expressed in the first part of the Theme, as was evident

from the textual > interpersonal > experiential order of thematic components (Halliday & Matthiessen, 2004), *on the contrary* in the post-subject position loses its thematic status, that is, it is no longer thematic.

The point to be made here is that unlike sentence-initial *on the contrary*, which could be either adversative or replacive, post-subject *on the contrary* universally functions as a marker of adversative extension, which compares two different topical Themes, the Subjects in some aspect realized by their respective Rhemes.

The function of contrastive topical Themes stands out more strongly in post-subject on the contrary. The post-subject on the contrary functions to give special emphasis to the subject as a contrastive topical Theme. For instance, in example (9) the post-subject on the contrary functions to foreground the subject, while the writer is making a comparison between the seductive and sensual women in the Gothic and the Gothic heroines.

(9) The seductive and sensual women in the Gothic are normally punished for their outward behaviour, Rebecca, for instance, tortures Maxim with her love affairs and ends up dead. Gothic heroines, on the contrary, are virtuous even though they may even portray sexual anxieties (BAWE-E)

As argued earlier that, in the absence of negation, a different topical Theme must be overtly presented in the clause complex containing *on the contrary*. By the use of an inserted, post-subject *on the contrary*, the topical Theme is fore-grounded. In (9), the fore-grounded Subject/topical Theme "Gothic heroines" is explicitly contrasted with the previously mentioned Subject/topical Theme, i.e. "seductive and sensual woman in the Gothic", which forms the first pair of contrast signaled by *on the contrary*. A secondary contrast between the Rhemes is dependent not on the negative and positive syntactic forms within the structure of Rhemes, but on the negative and positive

values represented in the Rhemes.

The other pattern of non-initial *on the contrary*, despite its low frequency in the corpus, is equally identifiable. As pointed out by Quirk et. al. (1985, p. 645), a clause containing a conjunct may be linked to a preceding clause by one of the coordinators (e.g. *and*, *or*, *but*). The corpus data reflects this tendency by yielding three instances of conjunctive *on the contrary* preceded by the paratactic conjunction *but*. The three instances (from the total of 27 instances of non-initial position *on the contrary*) of "*but* + *on the contrary*" are listed in the below:

- (10) However, Calvinism does not lead to world rejection, but on the contrary to world mastery. (BAWE-E)
- (11) Thus they argue that we are not at all closely related to Neanderthals, but that on the contrary by about 30,000 years BP an influx of anatomically modern H. sapiens into Europe had replaced the existing populations of Neanderthals. (BAWE-E)
- (12) Human beings are not naturally anti-social as Hobbes described, 'men have no pleasure, (but on the contrary a great deal of grief) in keeping company.' (Hobbes, 1991: 88) (BAWE-E)

As these examples demonstrate, on the contrary in this pattern differs from its use in sentence-initial or post-subject position in at least two ways. First, it is clear that while preceded by but, its cohesive function is replaced by the preceding but to conjoin two elements structurally in the correlative form of not ... but. Negation, being one of the most important defining features of correction, is made explicit with not, not and no, respectively, in the above examples. The elements conjoined in (10), (11) and (12) are prepositional phrases, that-clause and noun phrase respectively, which are all clause elements. Secondly, in terms of the semantic relation, in the case of but on the contrary, on the contrary is used to reinforce the replacive meaning initially and primarily conveyed by but.

#### 8.5 Summary

Despite previous beliefs of the conjunctive as a corrective or replacive marker which requires explicit negation, a frequency analysis has revealed that more than 50% of *on the contrary* in BAWE-E are not associated with a preceding negation.. The statistical information provides a starting point for the qualitative analysis of the two functional types of *on the contrary*. In analyzing the distinguishing features of the two functional types, the descriptive frameworks for the two functional types of *on the contrary* are first proposed by utilizing notions of (topical) Theme, Rheme and Focus within Systemic Functional Linguistics. It has been shown that in its replacive function, *on the contrary* requires explicit negation in the preceding clause complex and equivalence of topical Themes. The Focus is on Rheme of the clause complex introduced by *on the contrary*. In its adversative function, *on the contrary* requires different topical Themes as the first pair of contrast and different Rhemes as the second pair of contrast. Unlike the replacive *on the contrary* with one single Focus, the adversative *on the contrary* is associated with two-fold contrast and divided Focus on topical Theme and Rheme.

The syntactic positions of *on the contrary* are also shown to be interconnected with the functional distinctions of the conjunctive. While clause-initial *on the contrary* can be used to encode either an adversative or a replacive relation, instances of post-subject non-clause-initial *on the contrary* are deployed to encode an adversative relation.

# Chapter 9 Text-based Analysis of Adversative and Concessive Conjunctions

The corpus-based analysis in the previous chapters has revealed features of adversative and concessive conjunctions deployed by Chinese EFL learners based on the comparisons made with their British native-speaker counterparts. However, given the limitations of the corpus-based analysis in accounting for the co-text and contextual features of the conjunctions investigated, this chapter will draw on the method of discourse analysis to explore the functions of adversative and concessive conjunctions at text level. Text-level analysis involves examining how resources of lexicogrammar are deployed to realize semantics and context. Specifically, this chapter aims to illustrate how resources of clause complexing and the system of CONJUNCTION are deployed to mark textual transitions and how they are interconnected with thematic choices and the rhetorical organization of the text written by Chinese EFL learners.

The analysis in this chapter is based on a full-length text taken from the CLEC corpus. As indicated in Chapter 3, Section 3.2, the volume of text that can be processed decreases as we ascend the hierarchy of stratification, and the rank scales with each stratum (Matthiessen, 2006). That is, linguistic analysis at higher level in terms of 'stratification', i.e. at the stratum of discourse semantics and context, is less difficult to handle with lower volume of data. However, it should be pointed out that reducing the volume of data will not compromise the validity of the analysis. This is because the aim of this chapter is not to provide the quantitative description of the potential semantic and contextual features relevant to the use of adversative and concessive conjunctions, but to complement the corpus-based analysis of these conjunctions at the stratum of lexcio-grammar explored in the previous chapters.

The rest of this chapter is organized as follows. Section 9.1 provides an overview of

the text-based analysis of a text taken from the CLEC corpus. Section 9.2 presents the thematic analysis of the text with a view to identifying the contribution of thematic structures to text organization. Section 9.3 explores the instantiation patterns of clause complexing and conjunction in the text. Section 9.4 presents a rhetorical analysis of the text. Section 9.5 concludes the chapter with a summary.

## 9.1 An overview of the text-based analysis

This section presents an overview of the text-based analysis. The text to be analyzed is an argumentative essay on reducing crimes taken from the CLEC corpus, hereafter referred to as the 'Crime' text. As mentioned in Chapter 3, Section 3.1, argumentative texts represent the major text type of the CLEC corpus.

The text is first segmented into clause units, displayed in tabular form (See Table 9.1 below).

Table 9.1 The 'Crime' text segmented into clause units

Clause	Clause			
No.				
1	With the development of our society and economy. [sn2,s]. More and more crimes are committed in our daily life.			
2	Crimes seem to be one of the direct results of civilization.			
3	The U.S, a highly developed country, has the highest criming [wd2,2-] rate in the world.			
4	The number of crimes in developing countries are [vp3,s-] also increasing.			
5	Most governments [np5,s-] try to diminish crimes			
6	either [wd5,s-] by punishing criminals.			
7	Some people think			
8	that criminals should be rehabilitated,			
9	not be punished.			
10	However, the effective way to reduce crimes turns out to be to combine the two ways			
	together.			
11	Crime does great harm to our society.			
12	It theatens [fm1,-] the safety of our property [sn9,s-] our lives			
13	and prevents the development of the economy.			
14	But there are two kinds of criminals, real and unreal [wd4,s-]			
15	Real criminals are hostile to the society			
16	and they live on [wd3,2-4] stealing, robbing or smuggling.			
17	They hate laboring by themselves.			
18	When captured,			
19	they refuse to confess their crimes			
20	and even reaccomplish [fm1,-] crimes [cc3,1-]			
21	after they are set free.			

22	Therefore, to this kind of criminals, We [fm3,-] should punish them
23	because they deserve it.
24	However, unreal criminals usually commit crimes
25	without knowing them.
26	They are always kind, warm-hearted and responsible,
27	but they kill others,
28	rape others
29	or steal something
30	because they cannot control themselves.
31	Although the results are almost the same as those caused by real criminals,
32	they regret and acknowledge their crimes.
33	Therefore, they should be rehabilitated.
34	We should treat different criminals differently.
35	Some criminals are well-educated.
36	Some are still very young.
37	
	If rehabilitated,
38	the well-educated and the young can make contribution to the society.
39	Since there are more and more juvenile delinquencies nowadays,
40	the juvenile should be reeducated
41	because they are the hope of the nation.
42	To draw a conclusion, we should combine the two ways, punishing and rehabilitating
43	in order to reduce crimes. (t1-3)

The investigation in this chapter consistently takes the clause as the basic unit of analysis. The segmentation of the text into 43 clauses (including both finite and non-finite types) presented in Table 9.1 thus forms the basis of further analysis of the text. The thematic structure of each clause will be analyzed to shed light on the overall thematic organization of the text in Section 9.2. Section 9.3 will explore the instantiation patterns of clause complexing and conjunction, that is, how each clause can be interpreted in relation to other clauses either within or beyond the clause complex. Section 9.4 provides the rhetorical structure analysis of the text based on the rhetorical units, corresponding to clauses.

Thematic organization deals with the writing process where writers have to choose the right point of departure to organize the flow of information in their texts. The point of departure is defined technically as Theme in SFL, while the remainder is defined as Rheme (Halliday 1994; Matthiessen and Halliday 1997). Each clause of a text has its own Theme that foregrounds what the clause is going to be about, i.e. the topic and its own Rheme that supplies the details about this message. Theme can also be identified at paragraph and text levels. Paragraph-level Theme is called hyper-Theme and

Theme of the whole text is called macro-Theme (Martin, 1992). Fries (1983) argued that thematic progression and thematic content correlate with the structure and method of development of a text. Investigation of these higher-level Theme types is needed in analyzing the organization of text. In the words of Fries (1983, p. 119), "clause and sentence level Themes fit into a larger pattern which governs information flow within sequences of sentences".

As suggested by Halliday and Matthiessen (2004), thematic organization of the clauses is the most significant factor in the development of the text as "flow of information" (p. 588). As will be shown later in the chapter, logico-semantic relations are the most significant factor in the development of texts as logico-semantic (rhetorical) complexes. Thematic choices of each clause combine to form "periodic movements" (p. 588) of information as the text unfolds. Apart from its contribution to rhetorical development of text, Theme also correlates with CONJUNCTION. The selection of Theme is typically made to reveal the types of expansion (Matthiessen, 1995). For instance, temporal enhancement is likely to be associated with Themes indicating a specification of time, whereas in taxonomic elaboration, the Theme of a clause is likely to be the current term in the taxonomy (ibid). On the other hand, the rhetorical structure of a text is also dependent on the lexicogrammatical resources of clause complexing and conjunction as textual and structural Themes.

Thematic structures are concerned with textual status, having to do with how 'components' of messages are processed as information, whereas clause complexing and CONJUNCTION mark textual transitions between whole 'messages', or even message complexes (Halliday & Matthiessen, 2004). However, the transitions can be left to the reader to infer without the help of explicit makers (Halliday & Matthiessen, 2004). Regarding semantic relations that hold between text units, Mann and Thompson (1988, p. 244) state that "RST provides a general way to describe the relations among clauses in a text, whether or not they are grammatically or lexically

signaled".

Given the interconnections between thematic structures marking textual status and clause complexing, and CONJUNCTION marking textual transitions, it is difficult to explore anyone of these resources without referring to others. However, in order to highlight the distinction between textual status and textual transitions outlined in Halliday and Matthiessen (2004), thematic structure and resources of clause complexing and conjunction will be explored in two separate sections, namely Section 9.2 and Section 9.3, respectively.

## 9.2 Thematic interpretation

This section explores the thematic choices made in the text to show how they contribute to the text organization.

As mentioned, the Theme of a clause extends up to and includes the first experiential element, namely, the process, the participants in that process or any circumstantial factors, such as time, manner or cause (Halliday & Matthiessen, 2004). Theme in this sense is referred to as topical Theme, which is associated with two systemic values, namely, 'unmarked' and 'marked' (ibid). As suggested by Halliday and Matthiessen, in a declarative clause, Subject represents the unmarked Theme. If something other than the Subject is chosen as Theme, it is referred to as a marked theme. However, since the clauses in the 'Crime' text are all declaratives, the identification of Themes based on mood types is not relevant to the current discussion. Any item preceding the topical Themes are either textual or interpersonal in function, playing no part in the experiential meaning of the clause. They are termed 'interpersonal' and 'textual' Themes (Halliday & Matthiessen, 2004, p. 79). Textual Themes include conjunctive Adjuncts and structural conjunctions, which are deployed to mark textual transitions and contribute to the rhetorical organization of text. Interpersonal Themes include modal Adjuncts, comment Adjuncts and finite verbal operators serving as the Finite

element. However, since interpersonal Themes are absent in the 'Crime' text, they will be disregarded in the thematic analysis presented below. There are a number of textual Themes realized by conjunctive Adjuncts and structural conjunctions. These conjunctions will be marked out as Textual Themes, but further analysis will be presented in a separate section, i.e. Section 9.2.3 to highlight their contribution to mark textual transitions.

Thematic interpretation of the 'Crime' text will thus focus on topical Themes and the distinction between 'marked' and 'unmarked' selection of topical Themes. The first step of the thematic analysis is to present an overview of the thematic choices to illustrate their contribution to text organization, focusing on patterns of thematic progression (Danes, 1974), that is, how the current Theme is linked to the Theme or Rheme in the preceding and subsequent clause to form period movements (Halliday & Matthiessen, 2004). And then instances of marked Themes are explored to uncover the textual motivations for these choices and their intended functions.

As mentioned in the previous section, the investigation takes the clause (including both finite and non-finite types) as the basic unit of analysis. The text is segmented into 43 clauses. The Theme of each clause is identified, taking into account both Theme types and the distinction between marked and unmarked topical Themes. The thematic choices of the 'Crime' text are summarized in Table 9.2 below.

The analysis is presented in tabular form following the same notational conventions in Halliday and Matthiessen (2004): Single underlining = Theme; xxxx plain = topical Theme; xxxx italic = textual Theme; bold without underlining = displaced Theme; [[]] = downranked clause boundary. Space = paragraph boundary. In addition, the clauses are numbered so that they can be referred to in the discussion section.

Table 9.2 Thematic analysis of the 'Crime' text

Clause No.	Clause	Textual theme	Theme selection	
1	With the development of our society and economy. [sn2,s]. More and more crimes are committed in our daily life.	_	marked	
2	<u>Crimes</u> seem to be one of the direct results of civilization.		unmarked	
3	The U.S, a highly developed country, has the highest criming	_	unmarked	
5	[wd2,2-] rate in the world.	_	diffica	
4	The number of crimes in developing countries are [vp3,s-]		unmarked	
	also increasing.	_		
5	Most governments [np5,s-] try to diminish crimes		unmarked	
6	either [wd5,s-] by punishing criminals.		unmarked	
7	Some people think	_	unmarked	
8	that criminals should be rehabilitated,	+	unmarked	
9	not be punished.	_	unmarked	
10	However, the effective way [[to reduce crimes]] turns out to be [[to combine the two ways together]].	+	unmarked	
11	Crima doss great horm to our society		unmanisad	
11	<u>Crime</u> does great harm to our society.  It theatens [fm1,-] the safety of our property [sn9,s-] our lives		unmarked unmarked	
	<u>and</u> prevents the development of the economy.			
13	But there are two kinds of criminals, real and unreal [wd4,s-]	+	unmarked	
14 15		+	unmarked	
16	Real criminals are hostile to the society  and they live on [wd3,2-4] stealing, robbing or smuggling.	_	unmarked unmarked	
17	They hate laboring by themselves.	+	unmarked	
18	When captured,	+	unmarked	
19	they refuse to confess their crimes	T	unmarked	
20	and even reaccomplish [fm1,-] crimes [cc3,1-]	+	unmarked	
21	<u>after they</u> are set free.	+	unmarked	
22	Therefore, to this kind of criminals, We [fm3,-] should punish them		marked	
23	because they deserve it.	+	unmarked	
24	However, unreal criminals usually commit crimes	+	unmarked	
25	without knowing them.	'	unmarked	
26	They are always kind, warm-hearted and responsible,		unmarked	
27	but they kill others,		unmarked	
28	rape others	+	unmarked	
29	or steal something	+	unmarked	
30	because they cannot control themselves.	+	unmarked	
31	Although the results are almost the same as those caused by real criminals,	+	unmarked	
32	they regret and acknowledge their crimes.		unmarked	
33	Therefore, they should be rehabilitated.	+	unmarked	
33	Therefore, the should be remaintained.	,	ummarked	
34	<u>We</u> should treat different criminals differently.	_	unmarked	
35	Some criminals are well-educated.	_	unmarked	
36	Some are still very young.	_	unmarked	
37	<i>If</i> rehabilitated,	+	unmarked	
38	the well-educated and the young can make contribution to the society.	_	unmarked	
39	<u>Since there</u> are more and more juvenile delinquencies nowadays,	+	unmarked	
40	the juvenile should be reeducated	_	unmarked	
41	because they are the hope of the nation.	+	unmarked	
42	To draw a conclusion, we should combine the two ways,	+	unmarked	

	punishing and rehabilitating		
43	in order to reduce crimes. (t1-3)	ı	unmarked

As can be seen from Table 9.2 above, unmarked topical Themes corresponding to Subjects represent the dominant thematic choices in the text. In contrast to the predominant choice of Subject as unmarked topical Themes throughout the text, there are only two instances of marked Themes realized by circumstantial Adjuncts in Clauses 1 and 22. In cases of marked Themes, displaced Themes are highlighted in bold type in Table 9.2 above to illustrate the potential status of Subjects as unmarked Themes. In addition to topical Themes, there are also 20 instances of textual Themes, including structural ones. The preference for unmarked Themes in the 'Crime' text is in line with the general tendency of English to favor Subject as unmarked topical Themes of declarative clauses, suggested by Halliday and Matthiessen (2004).

After several readings, a hypothesis was formed that some part of the text is easier to follow with appropriate Theme selections, whereas other parts are less easy to follow. For instance, paragraph one (Clauses 1-10) seems to be the most disconnected due to the deployment of different topical Themes. With the exception of *crimes* in the second clause which is derived from Rheme of the first clause in a Rheme-Theme progression, most topical Themes in the first paragraph represent New information.

The second paragraph (Clauses 11-33) is easier to follow with the dominant topical Theme, i.e., the third-person pronoun *they*, which corresponds to the writer's classification of criminals into real and unreal ones announced in Clause 14. This also confirms that Clause 14, introduced by the sentence-initial *but*, serves as Theme of the paragraph, technically known as 'hyper-Theme' (Martin, 1992). The hyper-Theme functions to predict Theme choices in the text that follows. Following the hyper-Theme, i.e. Clause 14, the paragraph falls into two parts (for a rhetorical analysis of the text, see Section 9.4). The first part deals with the characterization of real criminals, and hence *real criminals* and the pronoun *they* referring to them are given

thematic prominence in a serious of clauses (Clauses 15-23). In this way, thematic continuity is maintained. This part ends with a clause introduced by therefore (Clause 23), indicating that the clause serves as a summary of real criminals. And then, with the introduction of unreal criminals as topical Theme of the clause introduced by however, i.e. Clause 24, the pronoun they referring to unreal criminals is given thematic prominence in a serious of clauses. Following the description of unreal criminals, this part ends with a clause introduced by therefore (Clause 33), indicating a conclusion parallel to Clause 24. In addition to the anaphoric link between the thirdperson pronoun they and real criminals and unreal criminals, thematic continuity in this paragraph is also maintained through subject ellipsis (Clauses 18, 20, 21, 25, 28, 29, 37). In contrast to the constant topical Themes in the two parts, the Rhemes are consistently New. The Rhemes are devoted to the description of real criminals and unreal criminals. The lexical items that function to build up the highly negative evaluation of real criminals and the mild positive evaluation of unreal criminals in the Rhemes form a direct semantic contrast (e.g. are hostile to the society in Clause 15 vs. are always kind, warm-hearted and responsible in Clause 26; regret and acknowledge their crimes in Clause 32 vs. refuse to confess their crimes in Clause 19). The constant topical Themes which are referentially recoverable and the Rhemes which are consistently non recoverable is a reflection of the unmarked combinations of textual statuses suggested by Halliday and Matthiessen (2004).

The last paragraph (Clauses 34-43) seems to be less organized than the second paragraph. This is largely due to the scrambled thematic structures in the paragraph. Apart from the topical Theme we in Clause 34 and Clauses 42-43, the writer makes use of various expressions referring to criminals including some criminals, some, the well-educated and the young, the juvenile, and they. However, it seems that the identities of these items are neither explicitly recoverable from the preceding text nor can they be accounted for in the communication process. Given the propositional content of Clause 34, which serves as hyper–Theme of the paragraph, it is expected

that the expressions refer to *different criminals*. However, judging from the Rhemes of the clauses, these expressions cannot be interpreted as referents of *different criminals* mentioned in Clause 34. Consequently, readers may have difficulty in tracking the identity of the *different criminals* and hence problems in cohesion.

Having outlined the dominant thematic choices in the text, I will now turn to the use of marked Themes with a view to uncovering the textual motivations for these choices. In cases of less-motivated marked Themes, suggestions for improvement are made.

The first instance of marked Theme occurs at the very beginning of the text, repeated below for convenience.

Clause 1: With the development of society and economy. [sn2,s]. More and more crimes are committed in our daily life.

Note that the prepositional phrase with the development of society and economy is followed by a full stop instead of comma, which is a problem of punctuation, as indicated by the error tag, [sn2,s]. The grammatical counterpart of Clause 1 is given below for purposes of thematic analysis.

Clause 1a: With the development of society and economy, more and more crimes are committed in our daily life.

Here, the prepositional phrase with the development of society and economy functions as a circumstance of 'Accompaniment' in the clause, with an additional sense of cause (Halliday & Matthiessen, 2004). The fronting of the circumstantial Adjunct gives rise to a marked thematic structure, which may be intended by the writer to provide a context for the problem described in the Rheme of the clause. However, if more and more crimes is selected as the unmarked topical Theme, the thematic continuity

between Clause 1a and the subsequent clause, namely Clause 2, can be maintained. To illustrate this point, a modified version of Clause 1a with unmarked topical Theme, together with the subsequent clause, is presented below. Note that the use of passive voice also helps to maintain thematic continuity.

Clause1b: More and more crimes are committed in our daily life, with the development of society and economy. Crimes seem to be one of the direct results of civilization.

To sum up, in absence of prior context to justify the fronting of circumstantial Adjunct with the development of society and economy as topical Theme, the selection of Subject more and more crimes as topical Theme is more appropriate for the purpose of maintaining thematic continuity with the subsequent clause in a Theme-Theme progression.

The second instance of marked topical Theme is associated with a special device to focus or foreground the Theme.

Clauses 22-23: Therefore, to this kind of criminals, we should punish them because they deserve it.

The preposition *to*, like *as for*, is a thematic marker, which functions to highlight the nominal group *this kind of criminals* as a 'focused Theme' (Halliday & Matthiessen, 2004). As suggested by Halliday and Matthiessen, this device has the effect of announcing the Theme circumstantially without disturbing the overall arrangement of the ensuing clause. Typically, the Theme is then 'picked up' by the appropriate pronoun in its natural place in the clause (ibid). In this case, *this kind of criminals* in Theme position is picked up by the pronoun *them* which functions as Complement of the clause. A relevant feature of this type of Theme concerns its inherently thematic position. In other words, the structure, though construed in the form of a circumstance,

cannot occur in non-thematic position, thus the ungrammaticality of Clause 22a below. Clause 22a: *Therefore, we should punish them, to this kind of criminals, because they* deserve *it.* This confirms that the preposition *to*, together with *the nominal group* serves as marked topical Theme.

As indicated above, the choice of a focused Theme is not necessitated by the grammatical structure, but motivated by the need to highlight a nominal group in initial position as Theme. The focused Theme *this kind of criminal* refers anaphorically to topical Themes in a series of clauses in the preceding text (Clauses 15-21), which focuses on the evaluation of *real criminals*. Therefore, although the prepositional phrase *to this kind of criminals* represents a marked choice of topical Theme, it is motivated by the need of the writer to maintain thematic continuity in the discourse.

# 9.3 Instantiation patterns of clause complexing and CONJUNCTION

As indicated in the previous section, the writer of the 'Crime' text made abundant use of structural conjunctions and conjunctive Adjuncts as textual Themes to guide the development of the text. This section examines these devices with a view to identifying their contribution to the rhetorical organization of the text.

According to Halliday and Matthiessen (2004), both clause complexing and CONJUNCTION function to mark textual transitions between messages via a set of logico-semantic relations. However, while resources of clause complexing concerned with the internal organization of each clause complex are deployed to guide the local development of text, the system of CONJUNCTION provides the resources for marking logico-semantic relationships that obtain between text spans of varying extent, ranging from clauses within clause complexes to long spans of a paragraph of more (ibid, p. 538). The instantiation patterns of clause complexing and CONJUNCTION in the 'Crime' text are set out in Table 9.3 below. The notational conventions are based on Halliday and Matthiessen (ibid). Structural Themes are

italicized and conjunctive Adjuncts are highlighted in bold.

Table 9.3 Clause complexing and conjunction in the 'Crime' text

1	CONJ	COMPLEX	
[1]			With the development of our society and economy.
			[sn2,s]. More and more crimes are committed in
			our daily life.
[2]			Crimes seem to be one of the direct results of
			civilization.
[3]			The U.S, a highly developed country, has the
			highest criming [wd2,2-] rate in the world.
[4]			The number of crimes in developing countries are
			[vp3,s-] also increasing.
[5]		α	Most governments [np5,s-] try to diminish crimes
[6]		×β	either [wd5,s-] by punishing criminals.
[7]		α	Some people think
[8]		'β1	that criminals should be rehabilitated,
[9]		'β=2	not be punished.
[10]	Enh:		<b>However</b> , the effective way [[to reduce crimes]]
	Concession		turns out to be [[to combine the two ways
			together]].
[11]			Crime de la conset hanne de com coniedo
[11]		1	Crime does great harm to our society.
[12]		1	It theatens [fm1,-] the safety of our property [sn9,s-] our lives
			Jour rives
[13]		+2	and prevents the development of the economy.
[14]	Enh:		But there are two kinds of criminals, real and
[1.]	Concession		unreal [wd4,s-]
[15]		1	Real criminals are hostile to the society
[16]		+2	and they live on [wd3,2-4] stealing, robbing or
			smuggling.
			The shot also will be the model of
[17]			They hate laboring by themselves.
[17] [18]		1×β	When captured,
		1×β 1α	When captured, they refuse to confess their crimes
[18]			When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-]
[18] [19] [20] [21]		1α	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.
[18] [19] [20]	Enh:	1α +2 α	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-]
[18] [19] [20] [21] [22]	Enh: cause	1α +2 α +2×β α	When captured, they refuse to confess their crimes  and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them
[18] [19] [20] [21] [22]	cause	1α +2 α +2×β	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.
[18] [19] [20] [21] [22]	cause Enh:	1α +2 α +2×β α	When captured, they refuse to confess their crimes  and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them
[18] [19] [20] [21] [22] [23] [24]	cause	1α +2 α +2×β α ×β	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it. However, unreal criminals usually commit crimes
[18] [19] [20] [21] [22] [23] [24]	cause Enh:	$ \begin{array}{c} 1\alpha \\ +2\alpha \\ +2\times\beta \\ \alpha \end{array} $ $ \times\beta \\ \alpha \\ +\beta $	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it. However, unreal criminals usually commit crimes without knowing them.
[18] [19] [20] [21] [22] [23] [24]	cause Enh:	1α +2 α +2×β α ×β	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it. However, unreal criminals usually commit crimes without knowing them. They are always kind, warm-hearted and
[18] [19] [20] [21] [22] [23] [24] [25] [26]	cause Enh:	1α +2 α +2×β α ×β α +β	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.  However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible,
[18] [19] [20] [21] [22] [23] [24]	cause Enh:	$ \begin{array}{c} 1\alpha \\ +2\alpha \\ +2\times\beta \\ \alpha \end{array} $ $ \times\beta \\ \alpha \\ +\beta $	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free. Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it. However, unreal criminals usually commit crimes without knowing them. They are always kind, warm-hearted and
[18] [19] [20] [21] [22] [23] [24] [25] [26]	cause Enh:	1α +2 α +2×β α ×β α +β	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.  However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible, but they kill others,
[18] [19] [20] [21] [22] [23] [24] [25] [26] [27]	cause Enh:	$ \begin{array}{c} 1\alpha \\ +2\alpha \\ +2\times\beta \\ \alpha \end{array} $ $ \times\beta \\ \alpha \\ +\beta \\ 1 $ $ \times 2 \alpha 1 $	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.  However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible, but they kill others, rape others
[18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29]	cause Enh:	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.  However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible, but they kill others, rape others or steal something
[18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30]	cause Enh:		When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it. However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible, but they kill others, rape others or steal something because they cannot control themselves.
[18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29]	cause Enh:	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	When captured, they refuse to confess their crimes and even reaccomplish [fm1,-] crimes [cc3,1-] after they are set free.  Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.  However, unreal criminals usually commit crimes  without knowing them. They are always kind, warm-hearted and responsible, but they kill others, rape others or steal something

[33]	Enh: cause		<b>Therefore</b> , they should be rehabilitated.	
[34]			We should treat different criminals differently.	
[35]			Some criminals are well-educated.	
[36]			Some are still very young.	
[37]		×β	If rehabilitated,	
[38]		α	the well-educated and the young can make	
			contribution to the society.	
[39]		×β	Since there are more and more juvenile	
			delinquencies nowadays,	
[40]		α	the juvenile should be reeducated	
[41]		×β	because they are the hope of the nation.	
[42]	Enh: cause	α	To draw a conclusion, we should combine the two	
			ways, punishing and rehabilitating	
[43]		×β	in order to reduce crimes. (t1-3)	

As can be seen from Table 9.3 above, structural conjunctions (in italic) are much more frequent than conjunctive Adjuncts (in bold). However, unlike structural conjunctions, which are confined to the internal organization of clause complex (Halliday & Matthiessen, 2004), conjunctive Adjuncts (e.g. however, therefore, to draw a conclusion) have a more global scope and thus play an important role in connecting steps of internal reasoning in augmentative texts, termed as 'internal conjunctions' (Halliday & Hasan, 1976). Furthermore, as can be seen from Table 4, conjunctive Adjuncts are most frequent in the second paragraph, which serves as elaboration of the main thesis presented in the first paragraph. In the discussion below, I will illustrate the functions of these conjunctive Adjuncts one by one.

The first instance of conjunctive Adjunct is found in the last clause of the first paragraph.

Clause 10: However, the effective way to reduce crimes turns out to be to combine the two ways together.

As mentioned in Section 9.2, Clause 10 serves as the hyper-Rheme of the first paragraph and macro-Theme of the whole text, where the writer establishes the thesis of the text. What is special about the thesis statement is that it involves a contrast with previous discourse consisting of two clause complexes. See Figure 9.1 below.

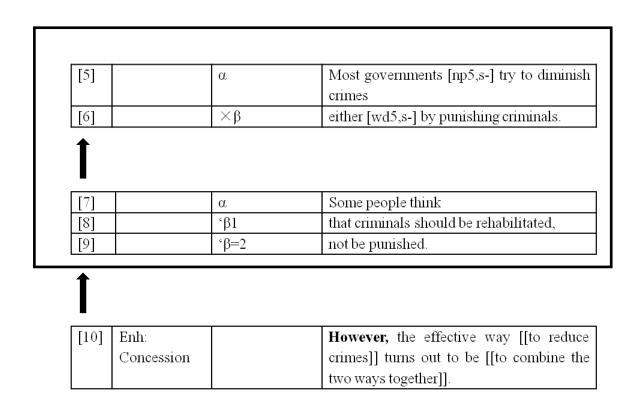


Figure 9.1 Analysis of internal concession signaled by *however* in Clause 10

As illustrated by Figure 9.1, in order to interpret the concessive relation set up by however in thematic position in Clause 10, readers have to refer to two clause complexes in succession in the preceding text. The domain of the relation is indicated lexically by the two ways in Clause 10, which refers not only to punishing criminals in Clause 6, but also to rehabilitated in Clause 8. The relation is internal in the sense of 'admittedly' rather than 'frustrated cause' (Matthiessen, 2002). In other words, the views on reducing crimes held by most governments and some people are acknowledged, but Clause 10 conveying the writer's point of view is emphasized. At the same time, it is worth noting that an adversative relation seems to be present between the two adjacent clause complexes in the preceding text, as illustrated by the upwards arrow in Figure 4. Unlike the concessive type of enhancement signaled by however, the relation is left implicit. However, although there is no conjunctive to mark the relation, the contrast can be easily inferred from the direct semantic opposition between punish and rehabilitated in Clause 6 and 8, respectively. This

contrast also leads to the contrastive interpretation of the topical Themes of Clause 5 and 7, namely *most governments* and *some people*. The two-fold contrast between topical Themes and the corresponding Rhemes has been analyzed as an important distinguishing feature of adversative type of extension encoded by multivalent conjunctions such as *while* and *on the contrary* (See Chapters 6 and 8). While the adversative relation can be made explicit with conjunctive Adjuncts such as *on the other hand* or *in contrast*, these conjunctives cannot be used as substitutes of *however* in Clause 10 which encodes the internal concessive relation. The internal concession may be signaled by the conjunctive Adjunct *nevertheless*. However, given the scope of the relation intended by the writer, it is difficult to argue for the *although*-clause substitution.

Conjunctive Adjuncts are most frequent in the second paragraph. As the following discussion will show, these conjunctive Adjuncts are deployed to signal the internal organization of the text.

First, with an initial *but*, a seeming contrast is set up between Clause 14 and the preceding text (Clauses 11-13). See Figure 9.2 below.

[11]		Crime does great harm to our society.
[12]	1	It theatens [fm1,-] the safety of our
		property [sn9,s-] our lives
[13]	+2	and prevents the development of the
		economy.
$\overline{}$	 ·	

[14]	Enh:	<b>But</b> there are two kinds of criminals, rea	Enh:	al
	Concession	and unreal [wd4.s-]	Concession	

Figure 9.2 Analysis of sentence-initial but in Clause 14

However, it seems that no contrast can be inferred from the context. The question then arises as to how the text span covering Clauses11-14 can fit into the whole text. One

possible interpretation of the sentence-initial *but* could be concessive enhancement, that is, although *crime does great harm to society*, the harm caused by *real criminals* and *unreal criminals* are different and hence the two ways of punishing and rehabilitating criminals. Under this interpretation, Clause 14 introduced by *but* functions as Hyper-Theme of the paragraph anticipating the problem to be elaborated in the text that follows.

The clause complex consisting of clauses 24 and 25 is introduced by another instance of *however*.

Clauses 24-25: However, unreal criminals usually commit crimes without knowing them.

The relation signaled by *however* differs from the one in Clause 10 in the first paragraph discussed above. As can be seen from Table 2, the clause-complex introduced by *however*, seems to divide the paragraph into two sub-sections. It is easy to see that the writer indicates a direct comparison and contrast between what has been said about real criminals from the text span consisting of Clauses 15-22 and what is to be said about unreal criminals in the text that follows (Clauses 24-33). The adversative relation signaled by *however* in Clause 24 can be replaced by conjunctive Adjuncts such as *in comparison*, *in contrast* or *on the other hand*. In contrast, the conjunctive Adjunct *nevertheless*, which is typically deployed to encode concessive enhancement, would be inappropriate in this case.

The two instances of *therefore* in the second paragraph serve to mark an internal causal relation between the clause complex containing the conjunctive and the preceding text.

Clauses 22-23: Therefore, to this kind of criminals, We [fm3,-] should punish them because they deserve it.

# Clause 33: Therefore, they should be rehabilitated.

The two clause complexes introduced by *therefore* serve as hyper-New, corresponding to Clause 10 as the hyper-Theme, which introduces into the discourse two types of criminals.

Following the two Hyper-News in paragraph two, the writer reinforces the thesis with the conjunctive Adjunct *to draw a conclusion* in Clauses 42-43 in the third paragraph.

Clauses 42-43: To draw a conclusion, we should combine the two ways, punishing and rehabilitating in order to reduce crimes. (t1-3)

The initial conjunctive Adjunct has a global scope over the whole of the preceding text and thereby serves as the Macro-New of the text.

Having explored the functions of initial conjunctive Adjuncts in the text, I will discuss briefly some instances of structural conjunctions. As mentioned, the writer made abundant use of structural conjunctions to guide the local development of the text. However, due to the scope of this section, I will focus on the functions of *but* and *although* in Clause 27 and Clause 31, respectively.

Unlike the sentence-initial *but* in Clause 10, which seems to have a fairly global scope, *but* in Clause 27 signals a local concessive relation within the clause complex, as illustrated in Table 9.4 below.

Table 9.4 Analysis of the paratactic nexus linked by but

		•
[26]	1	They are always kind, warm-hearted and responsible,
[27]	×2 α 1	but they kill others,
[28]	×2 α +2	rape others
[29]	×2 α +3	or steal something
[30]	×2×β	because they cannot control themselves.

As can be seen from Table 9.4, the *but*-clause, together with the three subsequent clauses, is paratactically linked to the preceding clause, namely Clause 26. Clause 26 conveys the positive judgments of unreal criminals through the relational process *are always kind, warm heated* and *responsible*. In contrast, the clause introduced by *but*, which is a combination of hypotactic enhancement and paratactic addition, conveys negative judgment via verbs denoting the material process *kill others, rape others or steal something*. The contrast between the positive and negative judgments involves logic opposition and hence the external concessive sense of *but*. In other words, given the positive attributes of unreal criminals described in Clause 26, it is suspiring to say that they are involved in criminal acts.

Immediately following the paratactic nexus linked by *but* is another instance of external concession encoded by *although* in Clause 31, as illustrated by Table 9.5 below.

Table 9.5 Analysis of the hypotactic nexus bound by *although* 

[31]	×β	Although the results are almost the same as those caused by real criminals,
[32]	α	they regret and acknowledge their crimes.

The initial *although*-clause partially repeats what has been said in the preceding text about the criminal acts of *unreal criminals* via the topical Theme, *the results*. The negative judgment, however, is conceded by the subsequent main clause, which emphasizes the positive mentality of unreal criminals via verbs denoting mental process, i.e. *regret and acknowledge their crimes* thereby giving a sense of frustrated cause. The concessive sense is also clear from the rhetorical development of the text. Following the hypotactic nexus, Clause 33 (*Therefore, they should be rehabilitated*.) represents the internal result of the preceding text.

# 9.4 Rhetorical structure analysis

The previous section has identified the instantiation patterns of clause complexing and

CONJUCNTION in the realization of logico-semantic relations. However, it is important to note that the semantic relations that hold between text units in a text may be independent of conjunctions (structural) or conjunctive Adjuncts (cohesive) that serve as textual guidance by indicating the relations. In other words, the relations may be left implicit as well. As Matthiessen and Thompson (1988) state, "the existence of perceived organizational, or rhetorical, relations between parts of the text is the most significant factor in creating and interpreting of texts as coherent" (p. 287). One of the most influential theories that aim to characterize the coherence relations in a text independent of linguistic markers is Rhetorical Structural Theory (RST) (Mann & Thompson, 1987/1988; Mann et al., 1992; Matthiessen & Thompson, 1988). Admittedly, RST and Systemic Functional Linguistics (SFL) are comparable in many aspects. See Chapter 2, Section 2.2.1 for the discussion of the two frameworks with respect to semantic (rhetorical) relations. However, the fact that the two frameworks can be used for different purposes is worth highlighting. As a theory that provides a comprehensive view of language in terms of systemic potentials, SFL has been applied for the investigation of individual conjunctions in the previous chapters. On the other hand, RST can provide the descriptive resource for analyzing relations that are not signaled by conjunctives. Furthermore, RST has an advantage over SFL in that the rhetorical relations can be analyzed to reveal their relevance to the hierarchical structure of the text, which makes RST a particularly useful resource for the textbased analysis in this chapter. Given these considerations, this section draws on RST to shed light on the rhetorical relations that hold between text units and the connections between these relations in the 'Crime' text.

In Mann and Thompson (1988), English texts are described in terms of twenty-four relations. The full definitions of these relations can be found in Mann and Thompson (1988) or the RST web site (Mann & Taboada, 2010). Before moving on to the analysis of the sample text in terms of these relations, I will first outline two fundamental distinctions in RST.

The first distinction concerns the one between nucleus-satellite and multinuclear relations. Based on the absence or presence of satellite, RST relations can be classified into nucleus-satellite and multi-nucleus ones. Mann and Thompson suggest that 21 of the 24 relations are associated with a nucleus-satellite structure (e.g. Elaboration, Evidence, Concession, Purpose, Motivation, etc.). The nucleus is the part that conveys the writer's main communicative goal and the satellite is the part that provides subsidiary information to help bring about this goal (Mann & Thompson, 1988). They further suggest that because the nucleus is more essential to the writer's purposes, it is more capable of standing out without the other span and less susceptible to substitution of other content. In contrast, the text spans in a multinuclear relation (Sequence, Contrast, and List) are in a symmetric relationship in which neither span is more central than the other one. According to Matthiessen and Thoompson (1988), the distinction between nucleus-satellite and multi-nucleus relations is similar to that between hypotaxis and parataxis in the grammar of clause complexing and hence they proposed the term 'rhetorical complexing'. That is, a nucleus-satellite relation is like hypotaxis, where the two segments being related are of unequal weight, whereas a multi-nucleus relation is like parataxis, where the two segments being related are of equal status.

The second distinction concerns the one between Presentational and Subject Matter relations. Presentational relations are those whose intended effect is to increase some inclination in the reader, such as the desire to act or the degree of positive regard for, belief in, or acceptance of the nucleus. For instance, according to the constraints on the relation of Evidence proposed by Mann and Thompson (1988), the relation holds when the nucleus, i.e. a claim which readers might not believe to a degree satisfactory to the writer, is linked to the satellites, i.e. propositions that readers find credible. The relation is presented to increase reader's belief of the claim. On the other hand, Subject Matter relations are those whose intended effect is that the reader recognizes

the relation in question (Mann & Thompson, 1988). For instance, the relation of Elaboration is used to link a statement to a text span that provides additional detail for the statement. The relation is concerned with the subject matter in question rather than the writer's intention to increase any inclination in the reader. The distinction between Presentational and Subject Matter relations seems to coincide with previous distinctions between internal and external conjunctive relations made in Halliday and Hasan (1976). Matthiessen (2013) suggest that internal and external relations differ with respect to the system of ORIENTTAION of rhetorical relations: "internal relations are oriented towards interpersonal meaning, that is, how relations develop text as interactive moves, whereas external relations are towards the ideational meaning, that is, how relations link segments of the experience being construed in the text to one another" (p. 16).

Prior to the RST analysis, the 'Crime' text is segmented into numbered text units. Theoretically, a text unit can be of any size that fit the purposes of the analysis, but dependent clauses are normally taken as elementary text units (Mann & Thompson, 1988). This is because relations between dependent clauses and the main clauses in hypotactic nexuses are typically signaled directly by structural conjunctions and thus they appear to be relatively straightforward to readers. With respect to the relationship between grammar and discourse structure, Matthiessen and Thompson (1988) argue for a direct mapping between subordinate (hypotactic) clauses and satellites of RST relations. In addition, the primary function of clause complexing including hypotaxis is to guide the local development of text (Hallliday & Matthiessen, 2004) and, consequently, they are less relevant to the global text structure than relations between dependent clauses. For these reasons, I decide to take dependent clauses as the basic text unit for RST analysis. However, to make the RST analysis comparable to the thematic analysis and logico-semantic relations discussed in Sections 9.2 and 9.3, I decide to include independent clauses as components of the text as well, but will only analyze the rhetorical relations between adjacent dependent clauses. See Figure 9.3

# below for the segmentation of the text.

[1] With the development of our society and economy. [sn2,s]. More and more crimes are committed in our daily life. [2] Crimes seem to be one of the direct results of civilization. [3] The U.S., a highly developed country, has the highest criming [wd2,2-] rate in the world. [4] The number of crimes in developing countries are [vp3,s-] also increasing. [5] Most governments [np5,s-] try to diminish crimes [6] either [wd5,s-] by punishing criminals. [7] Some people think [8] that criminals should be rehabilitated, [9] not be punished. [10] However, the effective way [[to reduce crimes]] turns out to be [[to combine the two waystogether]].

[11] Crime does great harm to our society. [12] It theatens [fm1,-] the safety of our property [sn9,s-] our lives [13] and prevents the development of the economy. [14] But there are two kinds of criminals, real and unreal [wd4,s-][15] Real criminals are hostile to the society [16] and they live on [wd3,2-4] stealing robbing or smuggling [17] They hate laboring by them selves. [18] When captured, [19] they refuse to confess their crimes [20] and even reaccomplish [fm1,-] crimes [cc3,1-] [21] after they are set free. [22] Therefore, to this kind of criminals. We [fm3,-] should punish them [23] because they deserve it. [24] However, unreal criminals usually commit crimes [25] without knowing them. [26] They are always kind, warm-hearted and responsible, [27] but they kill others, [28] rape others [29] or steal something [30] because they cannot control them selves. [31] Although the results are almost the same as those caused by real criminals, [32] they regret and acknowledge their crimes. [33] Therefore, they should be rehabilitated.

[34] We should treat different criminals differently. [35] Some criminals are well-educated. [36] Some are still very young [37] If rehabilitated, [38] the well-educated and the young can make contribution to the society. [39] Since there are more and more juvenile delinquencies nowadays, [40] the juvenile should be reeducated [41] because they are the hope of the nation. [42] To draw a conclusion, we should combine the two ways, punishing and rehabilitating [43] in order to reduce crimes. (t1-3)

Figure 9.3 Segmentation of the 'Crime' into text units for RST analysis

Then, using the set of RST relations in Mann and Thompson (1988), I annotated each pair of adjacent text units to build up the rhetorical structure tree of the 'Crime' text, which is presented diagrammatically in Figure 9.4 below on the next page.

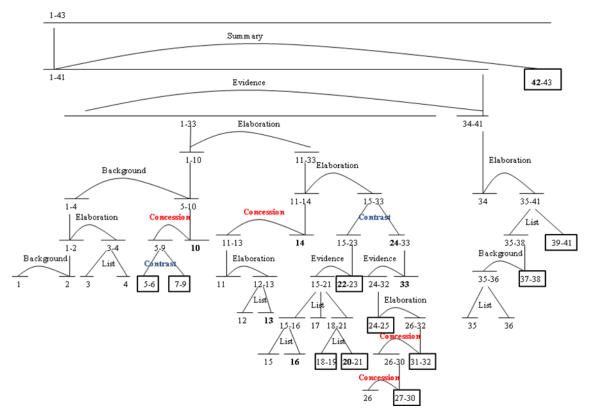


Figure 9.4 RST analysis of the 'Crime' text

The text structure, as illustrated by Figure 9.4, obeys the constraints on RST relations put forth by Mann and Thompson (1988). The text structure is a binary tree whose

leaves are the basic text units in the 'Crime' text. In the case of hypotactic nexuses, the dependent clauses and the main clauses are placed within the boxes and are not subject to RST analysis. Each node in the tree represents either the nucleus or satellite. Nuclei are represented by straight lines, while satellites are linked to their nuclei with curved lines. On the other hand, the absence of satellites indicates that the relation is multi-nucleus. The text unit is highlighted in bold when the associated relation is signaled by a conjunction or conjunctive Adjunct. Applications of Contrast and Concession relations are highlighted in blue and red, respectively. Note that while Concession is the typical type of relation in terms of nuclearity, i.e., nucleus-satellite, Contrast is a multi-nucleus relation. See Chapter 2, Section 2.2.1 for the detailed discussion of the distinction between Concession and Contrast in RST.

As can be seen from Figure 9.4, the analysis contains 26 applications of 7 different relations: Summary, Evidence, Elaboration, Background, Concession, List and Contrast. Given the scope of this section, I will not discuss each of these relations in detail, but will outline the connections between these relations and their relevance to the overall structure of the text. Furthermore, the distributions of nucleus-satellite and multi-nucleus relations and Presentational and Subject Matter relations will also be discussed to shed light on their different contributions to the text structure.

As shown in Figure 9.4, at the top level, the 'Crime' text is broken into two text spans: Units 1-41 and Units 42-43, which is a hypotactic nexus. The span covering Units 1-41 forms a satellite that stands in a Summary relation to the span of Units 42-43 (*To draw a conclusion, we should combine the tow ways, punishing and rehabilitating in order to reduce crimes*). The conjunctive *to draw a conclusion* explicitly suggests that what follows is a summary or the main point of the text.

The text span covering Units 1-41 is further broken down into two smaller text spans, i.e. Units 1-33 and Units 34-41, where the former is a satellite that stands in an

Evidence relation to the latter. The nucleus, i.e. Units 34-41, expresses a belief that the writer intends the reader to adopt and the satellite, Units 1-31, is presented to increase the reader's belief by providing evidence for the belief. The nucleus is further decomposed of two text spans standing in a relation of Elaboration. Unit 34 presents a claim (we should treat different criminals differently) which is elaborated by Units 35-41, providing details about different criminals. As can be seen in Figure 9.4, the satellite, Units 35-41, is organized in a multi-nucleus relation of List between Units 35-38 and Units 39-41, with each span being devoted to the description of one type of criminal. However, it is worth noting that the satellite which is organized in a relation of List does not serve to elaborate the nucleus, that is, the claim made in Unit 34 (we should treat different criminals differently) effectively. The differences between the well-educated and the young described in Units 35-38 and the juvenile described in Units 39-41 are not clearly stated. Moreover, the classification of the criminals in this part of the text does not agree with the distinction made in the preceding text between real criminals and unreal criminals. Consequently, this part of the text may be considered less coherent by the reader. One way to improve is to replace the satellite with different types of elaboration without changing the writer's overall communicative purpose. Text spans that stand in a relation of Contrast may be more appropriate in this case.

The satellite of the Evidence relation, Units 1-31, is organized by a relation of Elaboration between Units 1-10 and Units 11-33. The nucleus, Units 1-10, is used to convey the thesis statement of the text and the satellite, Units 11-33, is used to provide more detail about the thesis statement, i.e. about the two ways of reducing crimes. As can be seen from Figure 9.4, the majority of the RST relations occur in these two regions (Units 1-10 and Units 11-33) of the text structure.

The nucleus of the Elaboration relation, Units 1-10, is organized in a relation of Background between Units 1-4 and Units 5-10. The satellite of the Background, Units

1-4, provides context that helps readers understand the situation presented in the nucleus. While the satellite is optional and can be removed, the nucleus of the Background, Units 5-10, provides information central to the writer's communicative purpose. The nucleus is further analyzed as Concession between Units 5-9 and Unit 10. The nucleus of the Concession is the thesis statement of the text: however, the effective way to reduce crimes turns out to be to combine the two ways together. The conjunctive Adjunct however is used to signal the relation. However, it is worth noting that while the structural conjunction although can be used to distinguish Concession (within hypotactic clause nexuses) from multi-nucleus Contrast, however cannot serve as a reliable marker of Concession. For instance, the conjunctive is also deployed in the text in Units 24-25 to signal a relation of multi-nucleus Contrast between two larger text spans, i.e. Units 15-23 and Units 24-33. Although the relation between Units 5-9 and Units 10 is left implicit, it can be identified by applying Mann and Thompson's (1988) definition of Concession. As discussed in Mann and Thompson, the intended effect of the satellite of Concession is to increase the reader's positive regard toward the nucleus. Here, the reason of using Concession in the sense of 'although' is to point at the incompatibility between the beliefs held by 'most governments' and 'some people' concerning reducing crimes and, in spite of that, what the writer thinks to be the best way to reduce crimes. The satellite of the Concession, Units 5-9, is organized in a relation of multi-nucleus Contrast. Unlike the other application of Contrast, that is, between Units 15-23 and Units 24-33, the relation of Contrast between Units 5-6 and Units 7-9 is not signaled by any conjunctive. According to Mann and Thompson's (1988) definitions of RST relations, a relation of Contrast holds between text spans covering Units 5-6 and Units 7-9 because i) the situations presented in them are the same in many respects (ways to reduce crimes); ii) the situations are different in some respects (Most governments punish criminals while some people think criminals should be rehabilitated); iii) these situations are compared with respect to these differences. In other words, the relation is labeled as Contrast rather than Concession because the intention of the writer is not to increase readers' positive regard for any of the two text spans but to describe to them the two different views on reducing crimes. Considering the two spans in isolation, i.e. Unit 5-6 and Units 7-9, none of them deserves more prominence over the other. Taken together, the satellite of the Concession is less central to the writer's communicative purposes than the nucleus. With the removal of the satellite (Units 5-9), Unit 10 still conveys the writer's main point. However, by adding Concession, the writer expects what may be seen as unfavorable arguments for his claim and by acknowledging them, the writer eliminates potential counterarguments and also reinforces the credibility of the nucleus.

The text span covering Units 11-33, which serves to elaborate on the nucleus, Units 1-10, is decomposed into another application of Elaboration relation between Units 11-14 and Units 15-33. The nucleus, Units 11-14, is organized by a relation of Concession signaled by the sentence-initial but in Unit 14. However, it is only by relying on our knowledge that the degree of harm caused by different kinds of criminals, real and unreal, vary that can we uncover the underlying relation of Concession. That is, although crime does great harm to our society, it is important to know that the degree of harm caused by two kinds of criminals, real and unreal are different and it is based on the distinction between the two kinds of criminals that the writer develops his argument further. The satellite of the Elaboration, Units 15-33, provides further details of the two kinds of criminals. The elaboration is organized in terms of a multi-nucleus Contrast between Units 15-23 and Units 24-33. The conjunctive however in Unit 24 is used to signal the relation, but more importantly, the relation can be identified by the ideational content of the two text spans, i.e. the type of entities referred to by the clauses. Further evidence for indentifying the multinucleus Contrast is the similar organization structures of the two spans, Units 15-23 and Units 24-33. As can be seen in Figure 9.4, both Units 15-23 and Units 24-33 are organized in a relation of Evidence, signaled by therefore.

Having outlined the hierarchical structure of the text, I will now turn to the functions of the RST relations with respect to two important distinctions mentioned earlier in this section, i.e. between nucleus-satellite and multi-nucleus relations and Presentational and Subject Matter relations. First, the distribution of nucleus-satellite and multi-nucleus relations in the 'Crime' text is set out in Table 9.6 below.

Table 9.6 Distribution of nucleus-satellite and multi-nucleus relations

Nucleus-satellite		Multi	i-nucleus
	N		N
Summary	1	List	7
Evidence	3		
Background	3		
Concession	4	Contrast	2
Elaboration	6		
TOTAL	17		9

The table indicates that with the exception of seven instances of List and two instances of Contrast, nucleus-satellite relations dominate the text. This agrees with the empirical observations made by Mann and Thompson (1988) that most rhetorical relations hold between two non-overlapping text spans called nucleus and satellite. With respect to individual relations, the relatively high frequencies of List and Elaboration are particularly noteworthy. The frequent use of Elaboration can be explained with reference to the nature of the relation. According to Mann and Thompson (1988), Elaboration is used to provide more detail about the situation or some element of subject matter presented in nucleus. However, what is being elaborated on seems to be implicit with the name of the relation and it is often difficult to distinguish between the subtypes of Elaboration mentioned by Mann and Thompson. The definition seems to suggest that this relation is a weak one and can be applied in many situations as compared with other nucleus-satellite relations such as Concession, Evidence, etc. Moreover, as shown in Figure 9.4, applications of Elaboration tend to occur at a higher level as compared with those of List. That is, the satellite and nucleus that stand in a relation of Elaboration can be further decomposed into smaller text spans, whereas text spans that are linked in a relation of List tend to occur at the terminal level of the text structure. For instance, Units 1-10 and Units 1133 stand in an Elaboration relation. The satellite, i.e. Units 11-33, provides more detail about the information presented in the nucleus, i.e. Units 1-10. The satellite, Units 11-33, is organized by another application of Elaboration between Units 15-33 and Units 1-14 and the nucleus, Units 1-10, is organized by a relation of Background between Units 1-4 and Units 5-10. At the terminal level of this Background relation, there is an application of List between Units 3 and 4. Similarly, there are another four applications of List at the terminal levels of the text structure (between Units 12 and 13, Units 15 and 16, Units 18-19 and Units 20-21, Units 35 and 36). The terminal level applications of List frequently involve the use of the conjunction *and* as the explicit signal of the relation. On the other hand, there are also two application of List at higher levels, i.e. the one between Units 35-38 and Units 39-41 and the one between Units 15-16 and Unit 17. In these cases, the relation is left implicit.

The relatively high frequencies of List and Elaboration relations are closely related to the writer's preference for Subject Matter relations over Presentational relations. See Table 9.7 for the distribution of Presentational and Subject Matter relations.

Table 9.7 Distribution of Presentational and Subject Matter relations

Presentational		Subject Matter	
	N		N
Summary	1	Elaboration	6
Evidence	3	List	7
Background	3	Contrast	2
Concession	4		
TOTAL	11		15

Mann and Thompson (1988) consider relations of Summary, Evidence, Background and Concession as Presentational relations because they are relations that facilitate the presentation process and are internal to the text, as opposed to Subject Matter relations, which express parts of the subject matter of the text. It is interesting to note that nuclearity seems to be inherent in the definitions of Presentational relations. In contrast, Subject Matter relations do not distinguish between nucleus and satellite in their definitions. However, the relation of Elaboration, which is a nucleus-satellite

relation, seems to be an exception. Despite being a nucleus-satellite relation, Elaboration is similar to relations of List and Contrast in that they are all concerned with the subject matter or the ideational content of the text. In the 'Crime' text, the Subject Matter relations contribute to the development of key concepts, such as 'real criminals' and 'unreal criminals' and the criminal activities they are involved in, by providing more details (Elaboration), adding similar situations (List) and contrasting different situations (Contrast). The Presentational relations, on the other hand, are concerned with the writer's communicative intentions throughout the text.

Finally, I will conclude this section with some discussions on the use of conjunctions or conjunctive Adjuncts as signals of rhetorical relations. As mentioned earlier in this section, RST focuses on the coherence relations in a text and the relations are defined not in terms of the surface-level linguistic features but in terms of the intentions of the writer and the effect they are meant to cause in the reader's beliefs and attitudes.

The majority of the relations in the 'Crime' text are not signaled. This means that the relations do not depend on the lexicogrammatical features at the surface level but on the functions of the parts of the text. It is worth noting that conjunctions and conjunctive Adjuncts are deployed to signal relations at different levels of the discourse structure. Conjunctive Adjuncts are used to signal rhetorical relations between adjacent text units at a higher level, while paratactic conjunctions are used to signal relations within clause complexes and have a fairly local scope. As can be seen from Figure 9.4, only six applications of RST relations are explicitly signaled by conjunctive Adjuncts: *however* in Unit 10 helping bring out the Concession, the sentence-initial *but* in Unit 14 helping bring out the Contrast, *therefore* in Unit 22 helping bring out the Evidence, *however* in Unit 24 helping bring out the Contrast, *therefore* in Unit 33 helping bring out the Evidence, *to draw a conclusion* in Unit 42 helping bring out the Summary. As discussed above, these relations usually cover larger text spans than relations signaled by paratactic conjunctions. Note that relations

between hypotactic dependent clauses and the main clauses are not analyzed in this section. There are three instances of *and* helping bring out the List and one instance of clause-initial *but* helping bring out the Concession. These relations occur at the terminal levels of the discourse structure. With the exception of *however* in Unit 24 which signals the multi-nucleus mutual Contrast, the conjunctive Adjuncts are associated with the nucleus of the satellite-nucleus relations. With these conjunctives, the writer intended to draw the reader's attention to the information presented in the nucleus which is more central to the writer's purposes. The relation marked by *however* in Unit 24 is also exceptional in that it signals a Subject Matter relation, while the other instances of conjunctive Adjuncts are deployed to signal Presentational relations. Therefore, overall, the writer of the 'Crime' text tends to use conjunctive Adjuncts to link the steps of his arguments internal to the text. Among these relation, Concession and Evidence seems to be most central to the writer's communicative purposes. On the other hand, the writer uses paratactic conjunctions (*and*, *but*) mainly for the conceptual development of two types of criminals.

# 9.5 Summary

This chapter has investigated the use of adversative and concessive conjunctions at text level. Although the resources of lexicogrammar are still the concern of this chapter, it is the focus on the interaction between different resources of lexicogrammar and their relevance to semantics and context that makes the analysis in this chapter distinct from the corpus-based analysis in the previous chapters. For instance, while the investigation of adversative/concessive conjunctions in the previous chapters focused on clauses containing these conjunctions for systemic functional analysis, the exploration of instantiation patterns of clause complexing and CONJUNCTION in this chapter takes into account the role conjunctions have in connecting the steps in arguments as well as their role in organizing the sequence of real-world events. The distinction, as suggested by Halliday and Hasan (1976) is that of internal CONJUNCTION and external CONJUNCTION. Moreover, while

Theme/Rheme analysis has been applied to distinguish between different meanings of while and on the contrary, this chapter has explored the interconnections between the thematic choices made in a text and their relevance to the rhetorical development of the text. It has shown that the thematic organization of the clauses and clause complexes is the most significant factor in the development of the text (Halliday & Matthiessen, 2004).

Finally, it has shown how the rhetorical organization of text drawing on RST can shed light on the interconnections between the lexico-grammatical features of a text including clause complexing and CONJUNCTION which mark textual transitions and thematic and information structures that mark textual statuses of Theme/Given and Rheme/New.

# **Chapter 10 Conclusion**

Broadly stated, the primary aim of the present study is to examine from a systemic functional point of view differences in the patterns of instantiation of adversative, replacive and concessive conjunctions in English texts written by Chinese EFL learners and their native-speaker counterparts. In order to achieve this aim, the study adopted the corpus-based method combined with text-based analysis. This chapter concludes the study by exploring to what extent the research aim has been achieved.

The chapter is organized as follows. First, the findings emerging from the qualitative and quantitative analysis in the previous chapters, i.e. Chapters 4-9 will be summarized in Section 10.1 and based on these findings some final conclusions will be drawn in this section. This will be followed by some suggestions for future research in Section 10.2.

#### 10.1 Summary of findings

As stated in Chapter 1, this study aims to address the following research questions:

- 1. How do the uses of adversative, replacive and concessive conjunctions by Chinese EFL learners and native-speakers compare in terms of overall frequency, distribution of the types of inter-dependency and semantic relations and positional distributions?
- 2. How do the co-occurrence patterns of *but* bear on the types of logico-semantic relations it encodes?
- 3. How are the positions of *while*-clauses and the co-occurrence patterns of *while* related to the types of logico-semantic relations it encodes?
- 4. How are the various syntactic positions of *however* related to the types of semantic relations it signals?
- 5. How can different functional types of *on the contrary* be characterized in systemic functional grammar?

- 6. How do recourses of clause complexing and CONJUNCTION complement each other in the grammatical realization of rhetorical relations at text-level?
- 7. To what extent does the analysis of conjunctions in this dissertation shed new light onto the proposed systemic functional descriptions of clause complexing and CONJUNCTION?

Question 1 was addressed in Chapter 4, which provided a quantitative overview of a group of seventeen conjunctions in the semantic categories of contrast and concession in CLEC and the comparable native-speaker corpus, BAWE-E. The investigation draws on the classification of logico-semantic relations in Halliday and Matthiessen (2004). The conjunctions investigated thus include both the structural and nonstructural types that are typically deployed to construe the adversative, replacive or concessive relation in the form of clauses-complexes or cohesive sequences. Comparisons are made in three major aspects of these conjunctions across the corpora: i) overall frequency and distribution of the types of inter-dependency relations between clauses; ii) distribution of semantic categories; iii) positional distributions. Given the limitation of corpus-based methodology, which can only be processed at the stratum of graphology (Matthiessen, 2006), the investigation in Chapter 4 is primarily concerned with the quantitative aspects of the conjunctions. In addition to providing the quantitative overview, this chapter also provides a complementary view of clause complexing and CONJUNCTION as well as their metafunctional 'neighborhood' (Matthiessen, 2002, p. 239), i.e. circumstantial augmentation within the experiential system of transitivity by exploring various patterns of agnation. Overall, the overview presented in this chapter serves to provide the first step of the systemic functional account of four individual conjunctions selected for more in-depth analysis.

Questions 2, 3, 4 and 5 are related to the four individual conjunctions selected for the in-depth systemic functional analysis, namely *but*, *while*, *however* and *on the contrary*. These conjunctions were selected to represent paratactic, hypotactic and cohesive

sequences, respectively. Despite the apparent similarities shared by these conjunctions to realize adversative or concessive (or replacive in the case of *on the contrary* as well as the multivalent conjunction *but*) relations, the investigation focuses on different aspects of these conjunctions. Thus, Questions 2, 3, 4 and 5 are organized in a way to highlight the lexico-grammatical patterns that may be significant for interpreting the types of logico-semantic relations encoded by each individual conjunction.

Specifically, Question 2, concerning the paratactic conjunction *but*, was addressed in Chapter 5. Given the extremely high frequency of *but* in both corpora and the expected difficulty involved in distinguishing between different types of logicosemantic relations encoded by the conjunction, Chapter 5 focuses on the co-occurrence patterns of *but* to shed light on its meanings.

Question 3 related to the hypotactic conjunction *while* was addressed in Chapter 6. In light of the systemic potential of *while*-clauses to be placed before or after or even enclosed in the associated main clauses, the investigation of *while* focused on the interconnections between the positioning of *while*-clauses and the functions of *while* in CLEC and BAWE-E. Comparisons were made between initial *while*-clauses and final *while*-clauses for adversative and concessive relations across the two corpora. The co-occurrence pattern of *while*, i.e. *while* ... *may* was also investigated to serve as further evidence of the functional distinction between initial and final *while*-clauses for different meanings.

Question 4 with respect to the use of *however* in CLEC and BAWE-E was addressed in Chapter 7. Unlike the structural conjunctions *but* and *while* discussed in Chapters 5 and 6, respectively, the cohesive conjunction (or conjunctive Adjunct) *however* can be placed in various positions in a clause. Chapter 7 thus explores the interconnections between the syntactic positions of *however* and the types of semantic relations it encodes, including adversative and concessive relations.

Question 5, concerning the cohesive conjunction *on the contrary*, was addressed in Chapter 8. Unlike the investigation of conjunctions reported in the previous chapters, the focus of attention in Chapter 8 was turned to the description of two types of *on the contrary* emerging from the native-speaker corpus.

Question 6 was addressed in Chapter 9. As noted above, Question 6 concerns the instantiation patterns of adversative and concessive conjunctions in full-length texts. The text-based analysis focused on the contribution of conjunctions in the form of clause complexes and cohesive sequences to the rhetorical organization of text. In addition to these recourses, which mark textual transitions, the analysis also takes into account the textual resources such as thematic structure, which marks textual statuses. Overall, the text-based analysis in Chapter 9 has focused on the interconnections between these resources with reference to their contribution to text organization brought out by RST analysis.

Question 7 is concerned with the effectiveness of adopting systemic functional linguistics for achieving the research aim of the present study. Thus, unlike the previous research questions, the last research question is not distributed to any specific chapter. Rather, the question can be addressed only by reviewing the empirical findings of this study. Throughout Chapters 4 to 9, the conjunctions and conjunctive Adjuncts encoding the adversative and concessive subtypes of logicosemantic relations have been investigated as lexicogrammatical choices among the systemic potentials of alternative realizations in the system. Principles defined in Systemic Functional linguistics (Halliday, 1985; Halliday & Matthiessen, 2004) have been applied to interpret corpus frequency data. SFL stands out as the linguistic theory of systemic choices which captures the subtlety and significance of those options from a basic design that work in context of a larger framework. Thanks to its rich and robust descriptive resources, SFL allows a principled examination of the

actual choices made by Chinese EFL learners in comparison with those of nativespeakers, as well the potential ones which could have been made.

# 10.2 Suggestions for future research

I will end this dissertation with some suggestions for future research. Admittedly, there are many more possibilities than the ones to be outlined below. However, these directions seem to be of more interest at this point.

First, the scale of the text-based study in Chapter 9 can be expanded to include more texts. Moreover, it would be interesting to compare the instantiation patterns of clause complexing and CONJUNCTION in English texts written by Chinese EFL learners as compared with their native-speaker counterparts.

Second, the differences between EFL learners and their native-speaker counterparts with respect to the use of conjunctions and conjunctive Adjuncts can be explained by exploring various factors, including first language interference, presentation of these items in textbooks, etc.

Third, since the choice of conjunctive items is certainly influenced by the type of texts or registers, it would be interesting to explore the interconnections between the resources of clause complexing and CONJUNCTION and registers. Perhaps Biber et al. (1999) represent the most notable attempt at providing a corpus-based analysis of linguistic features across different registers. They found significant variation in the distribution of conjunctions and linking adverbials between different registers, i.e. conversation, fiction, newspaper, and academic prose. On the other hand, within systemic functional linguistics, Matthiessen (2013) explores the functional varieties of a language according to the context of use and thereby proposes the notion of "registerial catagraphy", which is defined as "the task of mapping out registerial

variation falling within the range intermediate between the two poles of the cline of instantiation — between the system (potential) pole and the text (instance) pole" (p. 1).

Finally, the corpus-based systemic functional description successfully accounts for the adversative and concessive conjunctions in English texts written by Chinese EFL learners in comparison with their native-speaker counterparts. However, it would be equally interesting to investigate conjunctions in other semantic categories, such as causal and temporal. A more complete analysis should take into account the conjunctions from all semantic categories. Future work is needed in order to make the analysis presented in this dissertation even more comprehensive.

# Appendices

# Appendix 1 The error tagging scheme of Chinese Learner English Corpus (Gui & Yang, 2003)

TAG	CATEGORY	ТҮРЕ	EXPLANATION
fm1	word	Spelling	spelling, coinage, abbreviation, apostrophe
fm2	word	word building	derivation, inflection, compounding, plurality (noun), irregularity(verb), 3rd person singular form(verb), syllabification, hyphenation, word division or fusion
fm3	word	Capitalization	lower initial letter for upper initial letter or vice versa
vp1	vb phr	Pattern	error in transitivity(vi as vt or vice versa), transitive verb pattern/ grammatical(cf Oxford advanced learner's dictionary of current English edited by A. S. Hornby)
vp2	vb phr	set phrase	phrasal verb and verbal phrase: error in form or use
vp3	vb phr	Agreement	number agreement with its subject (noun or pronoun)
vp4	vb phr	finite/non-finite	finite verb for non-finite verb or vice versa
vp5	vb phr	non-finite	infinitive error: form and use/ infinitive for participle or vice versa/ -ed participle for -ing participle or vice versa
vp6	vb phr	Tense	error in tense use within a sentence/ the sequence of tenses between sentences
vp7	vb phr	voice	error in the use of voice: active for passive or vice versa
vp8	vb phr	Mood	error in the use of mood: imperative, subjunctive/ improper structure of conditional sentences
vp9	vb phr	modal/auxiliary	misuse of modal/auxiliary verbs/ wrong form of modal verb(or auxiliary verb) and verb combination (e.g tense form, voice form, etc)
np1	nn phr	Pattern	Error in combination with other words/grammatical
np2	nn phr	set phrase	omission or replacement of a fixed element that goes after a certain noun
np3	nn phr	Agreement	number agreement of a noun with its determiner or a word that refers to it
np4	nn phr	Case	possessive case error: form or use

np5	nn phr	Countability	uncountable noun used as countable noun
np6	nn phr	Number	countable noun used with no determiner or -s/
про	IIII pili	rvamoer	a or -s with plural noun
np7	nn phr	Article	a/an confusion or definite/indefinite confusion
np8	nn phr	Quantifiers	misuse or confusion between many/much, (a) few/(a) little, some/any, etc
np9	nn phr	other determiners	misuse or confusion of demonstratives, wh- determiners, numerals, etc.
pr1	pron	Reference	incorrect/ambiguous pronoun reference/anaphoric
pr2	pron	anticipatory it	improper or wrong use of anticipatory it / it replaced by a demonstrative, etc
pr3	pron	Agreement	number agreement with a noun it refers to
pr4	pron	Case	case error of any personal pronoun
pr5	pron	wh-	misuse or confusion of interrogative, relative and conjunctive pronouns
pr6	pron	Indefinite	misuse or confusion of indefinite pronouns such as all/both, few/little, some/any, either/neither, etc
aj1	adj	Pattern	error in the combination with other words/grammatical
aj2	adj	set phrase	error in the idiomatic use of an adjectival phrase/ omission or replacement of a fixed element that goes after a certain adjective
aj3	adj	Degree	adjective degree error: form and use
aj4	adj	-ed/-ing confusion	-ed adjective for -ing adjective or vice versa
aj5	adj	predicative/attributive	predicative adjective used as attributive adjective
ad1	adv	Order	improper adverb placement/wrong position
ad2	adv	Modification	adjective modifier used as verb modifier/ other kinds of confusion
ad3	adv	Degree	adverb degree error: form and use
pp1	prep	Pattern	unacceptable combination with other words/grammatical
pp2	prep	set phrase	error in the formation or use of an idiomatic prepositional phrase
cj1	conj	Pattern	unacceptable combination with other words/grammatical
cj2	conj	set phrase	error in the formation or use of a phrase functioning as a conjunction
wd1	word	Order	misplacement of any word other than an adverb
wd2	word	part of speech	error in part of speech: right root but wrong word class
wd3	word	Substitution	error in word choice: right word class but wrong

			selection (any part of speech)
wd4	word	Absence	omission of a word(any part of speech)
wd5	word	Redundancy	oversuppliance of a word(any part of speech)
wd6	word	Repetition	unnecessary repeating of a word
wd7	word	Ambiguity	not clear word meaning/semantic
cc1	notional	n/n collocation	improper noun(phrase) and noun(phrase) combination/semantic
cc2	notional	n/v collocation	improper noun(phrase) and verb(phrase) combination/semantic
сс3	notional	v/n collocation	improper verb and noun(phrase) combination/semantic
cc4	notional	a/n collocation	improper adjective and noun(phrase) combination/semantic
cc5	notional	v/ad collocation	improper verb and adverb (or ad/v) combination/semantic
ссб	notional	ad/a collocation	improper adverb and adjective combination/semantic
sn1	sentence	run-on sentence	improper addition of clauses/fused sentence
sn2	sentence	sentence fragment	subordinate clause as a sentence/ any phrase as a sentence
sn3	sentence	dangling modifier	illogical adverbial modification of a clause
sn4	sentence	illogical comparison	error in the comparison of words or phrases in a sentence which can not be compared
sn5	sentence	topic prominence	the co-occurrence of an initial noun phrase and its equivalent(usually a pronoun) in the same sentence
sn6	sentence	Coordination	faulty parallelism of clauses (or words/phrases) in a sentence
sn7	sentence	Subordination	faulty attachment of a subordinate clause to the main clause
sn8	sentence	structural deficiency	error in the grammatical construction of a sentence: improper splitting, pattern shifting, confusing structure, etc
sn9	sentence	Punctuation	overuse, absence, choice, apostrophe, comma splice, etc.

#### Appendix 2 Logico-semantic annotation of while-clauses in BAWE-E and CLEC

#### Appendix 2.1 Initial *while*-clauses in BAWE-E (Sample=100)

- 1. While the complexity of this particularly bloody scene would have been the primary motive in the playwright's methods, simply an aural account of the action allows the audience to use their imagination which often feels more realistic and dramatic than simply a presentation of reality. (BAWE-E) (CONCESSIVE)
- 2. <u>While</u> Pentheus suffers bodily torture, Agave experiences a mental agony that will be intrinsic to her being for the duration of her life. (BAWE-E) (ADVERSATIVE)
- 3. <u>While</u> Pentheus arrogantly believes he has a clear understanding of how to overcome the threat of Dionysus, Bacchus is realistically confident he will effortlessly triumph over his enemy (Diller, "Euripides' Final Phase, p. 364). (BAWE-E) (ADVERSATIVE)
- 4. <u>While</u> man can be judged, the gods are the highest level of authority and are therefore able to design an image of justice that cannot be challenged by man. (BAWE-E) (CONCESSIVE)
- 5. <u>While</u> these facts highlight the merciless nature of Bacchus who is quick to cut down anyone who doesn't immediately praise him, it is possible that this god refuses to save these individuals as he can see through their pretence. (BAWE-E) (CONCESSIVE)
- 6. <u>While</u> Creon's intentions are utterly inhumane, he is certainly not the only character in this play who is guilty of irrationality. (BAWE-E) (CONCESSIVE)
- 7. <u>While</u> man is blamed for the tragic consequences of Antigone, Euripides has been considered as 'a critic of the Olympian gods' (Diller, "Euripides' Final Phase, p.356), suggesting that this play condemns the actions of irrational Dionysus. (BAWE-E) (CONCESSIVE)
- 8. <u>While</u> the explicit description is unnecessary, Creon's actions are not thoroughly irrational at this point. (BAWE-E) (CONCESSIVE)
- 9. <u>While</u> there are no immortal characters in this play, divine justice is alternatively demonstrated in the actions of characters, including Antigone and Haemon but particularly in the warnings of Tiresias. (BAWE-E) (CONCESSIVE)
- 10. <u>While</u> Creon is the leading power of Thebes, his decisions are also judged by the gods whose greater power allows them to justly punish the king. (BAWE-E) (CONCESSIVE)
- 11. <u>While</u> he should see through her lies, he is too delighted and overwhelmed with his wife's pretended display of affection to question her honesty. (BAWE-E) (CONCESSIVE)
- 12. <u>While</u> Hedda actively seeks control of LÃ yborg with the intention to destroy him, Elvsted's power is not something she sought, planned or understands. (BAWE-E) (CONCESSIVE)
- 13. <u>While</u> this mischievous behaviour is not exceptionally harmful, her objective to control the life of another can hardly be described in the same terms. (BAWE-E) (CONCESSIVE)
- 14. <u>While</u> Hedda aspires to acquire the authority of a man, Yerma wants to use her abilities as a woman, yet neither of these figures are presented as traditionally belonging to a single gender, making them tragic, androgynous figures. (BAWE-E) (ADVERSATIVE)
- 15. <u>While</u> she doesn't reject the household occupations attached to her gender, there is a frustrating void in her routine that craves a child: You're right! The women in their houses. (BAWE-E) (CONCESSIVE)
- 16. While Brack controls her actions with calm, authoritative imperatives such as, 'Don't point that

- thing at me' and 'Don't play the fool' (37), Tesman cannot trust her not to operate the pistols. (BAWE-E) (ADVERSATIVE)
- 17. <u>While</u> these attacks boast some plausibility, Wiseman is unconvinced that this technique is entirely successful. (BAWE-E) (CONCESSIVE)
- 18. <u>While</u> these constraints cause him to write for a readership, rather than an audience, he comfortably uses theatrical devices throughout his play, such as the inset masque, promenading and soliloquy. (BAWE-E) (CONCESSIVE)
- 19. <u>While</u> it may have been necessary to produce shocking material in competition for readership, the writer dramatically reduces the impact of this text by inventing unconvincing accusations in an already fictional work. (BAWE-E) (CONCESSIVE)
- 20. <u>While</u> he can perceive 'valour' (13) in Parliamentarian warfare, this is often disguised by bloodshed. (BAWE-E) (CONCESSIVE)
- 21. <u>While</u> Donne's outspoken nature towards God can be criticised as confident to the level of arrogance at times, he is firmly put in his place as this sonnet develops. (BAWE-E) (CONCESSIVE)
- 22. <u>While</u> a member of the Church of England has the freedom to adopt the beliefs of Laudianism, Arminianism or Calvinism among others, N. Tyacke considers Calvinism as 'the theological cement of the Jacobean church'. (BAWE-E) (CONCESSIVE)
- 23. <u>While</u> the pacifistic king offered greater freedoms for Catholics, it was clear that Catholicism in England was becoming an old, dying tradition which suffered a severe decline in numbers with the passing of each decade. (BAWE-E) (CONCESSIVE)
- 24. <u>While</u> these arguments conduct the opening octave of this sonnet, Donne forms the volta at his moment of realisation that he is unworthy to challenge the mystical ways of God: 'But who am I, that dare dispute with thee?' (9). (BAWE-E) (CONCESSIVE)
- 25. While he despairs at his subjection, it is possible that he is drawn to this religion because it offers less kindness to man which he believes to be just treatment of the fallen race. (BAWE-E) (CONCESSIVE)
- 26. <u>While</u> Donne appears to be a passionately devoted follower to the reader, he is unconvinced of his goodness. (BAWE-E) (CONCESSIVE)
- 27. <u>While</u> God would be expected to elect only the faithful for salvation, Calvinists believe that God saw equal merit in converting hateful and sinful hearts. (BAWE-E) (CONCESSIVE)
- 28. <u>While</u> the narrator strives to educate the young girl, her view of death forces him to revaluate his own comprehension of this concept and, ironically, her insistence eventually succeeds in educating him. (BAWE-E) (CONCESSIVE)
- 29. <u>While</u> the adult attempts to correct the child, Wordsworth highlights that 'we are seven' is a statement which cannot be corrected as, in the absence of an absolute truth, the child has the freedom to believe whatever she chooses. (BAWE-E) (CONCESSIVE)
- 30. <u>While</u> she provides company for her siblings, she understands they shall never suffer solitude as their bodies have been buried next to each other: (BAWE-E) (CONCESSIVE)
- 31. <u>While</u> the speaker is concerned for the goodness of her soul, her immediate concern is the survival of her body and she is therefore required to prioritise money over morals. (BAWE-E) (CONCESSIVE)
- 32. While Rossetti designs a role model for society in this woman, she contrasts her modesty with that of her visitors, who, for all their nobility, cannot conceal their contempt of Margaret. (BAWE-E) (CONCESSIVE)
- 33. While she begins to feel like she belongs to her Lady, indicated by her eagerness to define herself

- as 'almost child' to this figure, this progress is undone by her contemptuous guests, which signals how her happiness is completely dependent on society's acceptance of her. (BAWE-E) (CONCESSIVE)
- 34. <u>While</u> the reader is compelled to sympathise with the illegitimate child voiced in Rossetti's dramatic monologue, The Iniquity of the Fathers Upon the Children, Browning invites us to judge the narrator of his poem, Porphyria's Lover, by offering a psychological insight into the mind of a man who is guilty of domestic violence. (BAWE-E) (CONCESSIVE)
- 35. <u>While</u> Eulalie cannot perceive this balance, she can identify with women who thrive in the domestic realm since her diary informs her that she was once a 'budding colourless young rose of home' (8) with 'no wishes, no cares' and 'no hopes' (21). (BAWE-E) (CONCESSIVE)
- 36. While she goes on to admit that her domestic days were 'better days' (194), she relates this experience to being a child, rather than a woman; to someone who is growing up, not someone who has grown up only to achieve this simple life. (BAWE-E) (CONCESSIVE)
- 37. <u>While</u> the auditor in dramatic monologue is 'constituted more by the speaker's perceptions than by any separate reality' (Slinn, "Dramatic Monologue", p. 81), there is only a single indication that the father managed to insert any speech into the conversation. (BAWE-E) (CONCESSIVE)
- 38. <u>While</u> the use of the dramatic monologue to criticise society is common to both male and female writers, their genders often decide that of the speaker they decide to voice. (BAWE-E) (CONCESSIVE)
- 39. <u>While</u> Browning often fails to solve moral problems in his dramatic monologue, women writers provide society with answers in ambitious hope to inspire social change. (BAWE-E) (CONCESSIVE)
- 40. <u>While</u> Browning often facilitates the freedom of the dramatic monologue's unrestricted structure to develop a conversational tone, Rossetti chooses to regulate her verse using iambic trimeter. (BAWE-E) (ADVERSATIVE)
- 41. <u>While</u> this is highly problematic in a society which sought to create a sanctuary for women in the domestic setting, Browning portrays 'the dynamics of the home as deeply painful for both men and women...in the struggle for sexual dominance between husbands and wives'. (BAWE-E) (CONCESSIVE)
- 42. <u>While</u> his frustration with her treatment of other men discarded his authority in their relationship, she is reduced to the role of the passive by his imperatives and violent termination of her life. (BAWE-E) (CONCESSIVE)
- 43. While the last group were rare, they were however available. (BAWE-E) (CONCESSIVE)
- 44. <u>While</u> some monasteries had a substantial range of classical texts such as Corbie, others had remarkably few such as St Gall, which had only four pagan writers in four hundred manuscripts overall. (BAWE-E) (ADVERSATIVE)
- 45. <u>While</u> Set's scheme at the party for Osiris is again absent from Egyptian sources; there is one instance of Set holding a party in order to humiliate Horus in the tribunal. (BAWE-E) (CONCESSIVE)
- 46. While the Egyptians emulate the behaviour of the gods in myth because myths describe the nature of the cosmos (for example: Set killed Osiris in myth because he did so in reality); Plutarch believes that they re-enact the myths, which in themselves are symbolic of the nature of the universe (Set tries to kill Osiris because the chaotic part of the soul always fights the ordered part). (BAWE-E) (ADVERSATIVE)
- 47. <u>While</u> the king's growing affection for his mistress is abundantly in evidence, both the remaining royal family and the court seem to have held Pompadour in a distinct disregard. (BAWE-E) (CONCESSIVE)
- 48. While he explains that the Third Class is allowed to marry as they please, he omits to mention the

- so called mating festivals that were to take place at certain times of the year. (BAWE-E) (CONCESSIVE)
- 49. <u>While</u> during the First War, the aim was to maintain control over Sicily and the immediate area around her; the Second War, according to our sources, was a fight to avenge the loss of Sicily and to attack Italy. (BAWE-E) (TEMPORAL)
- 50. <u>While</u> the real object would have been placed safely behind a glass, the hands-on experience would provide a useful lesson. (BAWE-E) (CONCESSIVE)
- 51. While the south was dominated by the Gothic kingdoms, the north-west Europe was much less centralized and the system of chiefdoms was predominant in the early stage of post-Roman times. (BAWE-E) (ADVERSATIVE)
- 52. <u>While</u> the Viking influence on the shipbuilding in the British Isles is quite obvious because of the scale of Viking settlement and presence in Britain, the lands beyond Germany have been comparably little investigated. (BAWE-E) (ADVERSATIVE)
- 53. <u>While</u> the Franks or Anglo-Saxons was already Christians, in the central parts of Europe, as well as in Scandinavia the local pagan belief systems were still predominant. (BAWE-E) (CONCESSIVE)
- 54. <u>While</u> the 'old school' explanation was simply lack of wood resources, in 1980s archaeologists came to a conclusion, that maybe it was something less prosaic than that and found a connection to the contemporary economical and social processes. (BAWE-E) (CONCESSIVE)
- 55. While the known sites have been excavated again, there is apparently no evidence either for presence of absence of the cattle in the 'cattle part' of the long house, which forms part of its definition. (BAWE-E) (CONCESSIVE)
- 56. <u>While</u> these are the general principles of the heroic code, certain heroes in the 'Iliad' view the code and their heroic priorities differently. (BAWE-E) (CONCESSIVE)
- 57. <u>While</u> Hector and Achilles are fighting for themselves, certain heroes in the 'Iliad' view heroism as something other than killing heroes. (BAWE-E) (CONCESSIVE)
- 58. <u>While</u> Homer's heroes such as Achilles and Hector were judged on exploits in war, Virgil's chief hero, Aeneas, is judged on his descendants. (BAWE-E) (ADVERSATIVE)
- 59. While, on the one hand, Cato tells them that they are men who have 'decided on one source of safety following [his] camp...prepare your minds for...the highest toils', showing that he prioritises their freedom and the freedom of Rome and its citizens above all things, Caesar views the term 'citizen' as an insult, and thereby 'spurns his rebellious troops as unworthy of him, "cowardly citizens" who do not deserve to be called soldiers, much less his soldiers', showing how he desires only glory, seemingly uncaring about how many enemies he makes of friends in order to win this renown. (BAWE-E) (ADVERSATIVE)
- 60. <u>While</u> it is true to say that Haemon is clearly on Antigone's side, he does not always make this entirely obvious at the start, as he does not simply argue her case insultingly to Creon, but instead he tries to use rational and tactful rhetoric to make him be flexible rather than firing personal insults on his father's judgement, even if he believes it to be wrong. (BAWE-E) (CONCESSIVE)
- 61. <u>While</u> not prepared to give his full mind to his official responsibilities, he was already playing the part of emperors son so far as seducing girls and women went." (BAWE-E) (CONCESSIVE)
- 62. <u>While</u> in osteology lesions, breaks, tumours and infections can be studied, sometimes disease and trauma is only evident in soft tissue. (BAWE-E) (CONCESSIVE)
- 63. <u>While</u> a total of 642 bodies, both cremated and inhumed were studied, an estimate based on the cemetery's size placed its actual population between 13,536 and 180,480. (BAWE-E) (CONCESSIVE)

- 64. <u>While</u> the document must be used carefully due to its 'demonstrable errors ...(and) derivation from oral tradition', it is roughly contemporary to the period in question, and one of the only written sources for it. (BAWE-E) (CONCESSIVE)
- 65. <u>While</u> Halsall, is absolutely certain that 'the introduction of cremation into lowland Britain was the result of migration from northern Germany', due to the conspicuous similarity of the rites in both regions, he is reluctant to use grave goods as evidence of ethnicity. (BAWE-E) (CONCESSIVE)
- 66 <u>While</u> separated from their husbands and families, the wives of citizens (it is not known if women of lower status were allowed to participate) performed mysterious rituals, including the sacrifice of piglets. (BAWE-E) (TEMPORAL)
- 67. <u>While</u> the written sources agree that she was the most beautiful of all women, they contradict each other on almost everything else about her. (BAWE-E) (CONCESSIVE)
- 68. <u>While</u> these aspects of the story create more sympathy for Helen, her marked disloyalty to Troy as time goes on (as declared in the Odyssey) does not. (BAWE-E) (CONCESSIVE)
- 69. <u>While</u> this gave his poem (written a great deal later than the works of Homer) a degree of credibility, it also left him with the problem of fitting a character with features of a Greek hero into a poem that was intended to be the defining Roman epic. (BAWE-E) (CONCESSIVE)
- 70. <u>While</u> these ideas of slavery and infection don't coincide with today's idea of romance, we should consider what the Augustan idea of romance was. (BAWE-E) (CONCESSIVE)
- 71. <u>While</u> he makes great reference to the importance of law in democracy, Theseus doesn't clarify just how the law courts are fair. But this lack of detail is understandable given that the extract is from an emotional drama performed in a poetic style. (BAWE-E) (CONCESSIVE)
- 72. While this means that a total relativist thesis does not necessarily have to be self-refuting, a redefinition of absolute truth does not mean that the shared framework is a sufficient base for the thesis. (BAWE-E) (CONCESSIVE)
- 73. While EP seems to hold for truths of absolute nature in certain areas, relativism on the other hand redefines the concept of truth in a way that makes it meaningless to apply EP. (BAWE-E) (ADVERSATIVE)
- 74. <u>While</u> supporting the very concept of absolute truth seems to undermine the relativist project, one has to keep in mind that only a limited part of any framework will be the shared framework or middle ground. (BAWE-E) (CONCESSIVE)
- 75. While the former solution seems to avoid the objection more easily without too much complexity, the latter way seems to be necessary once we look at what Preston calls the "most successful of Putnam's objections." (BAWE-E) (ADVERSATIVE)
- 76. While this seems to make the notion of objective rationality completely arbitrary, it is sufficient to make the distinction between being right and merely thinking that one is right. (BAWE-E) (CONCESSIVE)
- 77. <u>While</u> lower gas prices are useful bargaining tools, countries like Georgia and Ukraine show that economic interests do not always come top on the FP agenda. (BAWE-E) (CONCESSIVE)
- 78. While Russia is well aware of the limits on its military force capabilities, as illustrated by a number of statements on state of Russian army, Putin still considers at least use of force a tool of the FP. (BAWE-E) (CONCESSIVE)
- 79. <u>While</u> Yeltsin's years were more chaotic and a number of actors have been engaged in Russian foreign policy making at the cost of its coherence and unity, recently it seems more appropriate to talk of Putin's foreign policy rather than a Russian one. (BAWE-E) (CONCESSIVE)

- 80. <u>While</u> certain are domestic groups that oppose alignment and cooperation with West, Putin has acted this way in the context of Russia's military, economic and diplomatic decline. (BAWE-E) (CONCESSIVE)
- 81. <u>While</u> Yieltsin tried to balance the influence of USA and its NATO allies, Putin has put Russian in a closer relationship with the West and has cooperated with US in areas vital to the latter's interest. (BAWE-E) (ADVERSATIVE)
- 82. <u>While</u> for many words we can think of an image corresponding to them, it is not true for all words. (BAWE-E) (CONCESSIVE)
- 83. <u>While</u> Locke takes words to be the units of communication, it would be easier to defend a view where sentences are the most basic units. (BAWE-E) (CONCESSIVE)
- 84. <u>While</u> it still does not refute the idea of the principle that normative reasons carry motivational power, it does pose problems to Smith's formulation and to the idea that moral judgements need to have motivational power. (BAWE-E) (CONCESSIVE)
- 85. <u>While</u> this is not necessarily, what Smith means by fully rational it is clear that he considers these features essential for an agent to make moral judgements, which conform with NMR argument. (BAWE-E) (CONCESSIVE)
- 86. <u>While</u> Smith analysis of normative reasons seems to be coherent, there are various objections to the solution. (BAWE-E) (CONCESSIVE)
- 87. <u>While</u> economic regionalism tends to lead to more creation rather than trade diversion, regional integration offers a good way to gain a competitive advantage against non-members. (BAWE-E) (ADVERSATIVE)
- 88. <u>While</u> most of the regional projects are limited to economic integration resulting in limited institution building mostly with economic responsibilities, political factors and changes play an important role in the process. (BAWE-E) (CONCESSIVE)
- 89. <u>While</u> economic motivation as explained above are important, globalization and global economic structures and markets make regional projects more attractive as a way to deal with global market and associated problems on a regional level. (BAWE-E) (CONCESSIVE)
- 90. <u>While</u> economic motivations for regional projects played an important role in the recent rise of regionalism, it has to be understood in the context of advances of globalisation. (BAWE-E) (CONCESSIVE)
- 91. <u>While</u> the diplomatic negotiations was previously conducted within the alliances or between the two superpowers, several initiatives have been launched both on regional and global level which used old international institutions like the UN or refurbished old ones like GATT into WTO. (BAWE-E) (CONCESSIVE)
- 92. <u>While</u> states remain principal agents of international negotiations and sovereign of international law, the domain of diplomacy is a more complex domain with a greater number and variety of actors. (BAWE-E) (ADVERSATIVE)
- 93. <u>While</u> Nicolson argues that "to talk about new and old diplomacy is to make a distinction without difference," (Monsieur Jules Cambon in Nicolson 1988: 29) there are good arguments maintaining that more than just the 'outward appearance of diplomacy' has gradually changed. (BAWE-E) (CONCESSIVE)
- 94. <u>While</u> the Cold war diplomacy invpolde interaction of states with other states, transnational diplomacy cuts across national; borders involves communication of state actors with non-state actors and intrusion of foreign states in previously domestic policy areas. (BAWE-E) (ADVERSATIVE)

- 95. While important of this form of power has already been recognized before, ""winning the hearts and minds" of Arab and Muslim populations has quite understandably risen to the top of the Bush administration's agenda."(Hoffman 2002) (BAWE-E) (CONCESSIVE)
- 96. While Berridge (1995) argues that the number of international institutions in international diplomacy has declined, several example show that they play a greater role in the new diplomacy. (BAWE-E) (CONCESSIVE)
- 97. <u>While</u> developments are being made, there is still some way to go before Weiser's vision of ubiquitous computing is fully realised. (BAWE-E) (CONCESSIVE)
- 98. <u>While</u> Isis was reassembling Osiris, in the original myth it was here she conceived their son the king Horus, who went on to rule Egypt in his father's stead, against the wishes of Set. 2 (BAWE-E) (CONCESSIVE)
- 99. <u>While</u> on his journey he had to sail past Scylla and Charybdis and as a result of some help from Circe, Odysseus and most of his men survive. (BAWE-E) (TEMPORAL)
- 100. <u>While</u> infertility itself is not seen as a major welfare issue, many infertile cows are prematurely culled which is seen as a welfare issue. (BAWE-E) (CONCESSIVE)

## **Appendix 2.2 Initial** *while-***clauses in CLEC (Sample=100)**

- 1. In 1960 the life expectancy was 40 years old. While in 1990 it increased to 60 years old. (CLEC) (ADVERSATIVE)
- 2. <u>While</u> celebrating the festival n forms of singing. [sn9,-] Dancing [fm3,-] and cheers. (CLEC) (TEMPORAL)
- 3. Some people like doing a job and do not want to change the things they were acustomed [fm1, -]. **While** some other people like changing their jobs constantly. (CLEC) (ADVERSATIVE)
- 4. The chemical Building is obviously newly built. From the board on the gate of the building, you can see it's onated [fm1,-]in 1992 by a well- off patriotic overseas Chinese[sn9,-] While over the garden, the main building in A--the English teaching building, was built 50 years ago, Some windows are broken, too. (CLEC) (ADVERSATIVE)
- 5. <u>While</u> in Zhong shan [fm2,-] University, there is a completely different scene. (CLEC) (ADVERSATIVE)
- 6. With more and more college students swarm into society, especially in tapped areas such as the coastal area in South-east China, skillful workmen with college certification are abundant. While in north-west of China, which still remains unexploited [fm2, 1-], few students are willing to go to work there. (CLEC) (ADVERSATIVE)
- 7. Dear Peter: Hello. I am glad to hear from you again. I am sorry to know that the situation in your country is so bad. <u>While</u> in China, with the open-door reform policy, the economic [wd2, 1-] is booming [wd5, -1] fast. (CLEC) (ADVERSATIVE)
- 8. While we write, we forget the words [wd3,-2] correct spelling. (CLEC) (TEMPORAL)
- 9. While working, he comes to know the people, the customs and even the county's economy and polics [fm1,-]. (CLEC) (TEMPORAL)
- 10. <u>While</u> in Padua, Galileo had written a book concerning the movement of heavenly bodies. (CLEC) (TEMPORAL)
- 11. While studying abroad, we will contact with many people from different countries. (CLEC) (TEMPORAL)
- 12. While studying make you use the foreign language all the time [sn2,s-]. (CLEC) (TEMPORAL)
- 13. <u>While</u> Amelia's appearance was a complete failure. Mrs Rawdon Crawley's entrance was on the contrary, dazzling. .. (CLEC) (TEMPORAL)
- 14. <u>While</u> listening, one should try one's best to understand its meaning and it is better for them to imitate the speaker. (CLEC) (TEMPORAL)
- 15. In 1960, the age of the whole society [wd3,1-] was from 0 to 40 or so [wd7,s-]. While in 1990, the age ranged from 0 to 60 [wd7,s-], obviously, the life of a man [wd7,s-] has increased. (ADVERSATIVE) (CLEC)
- 16. <u>While</u> we are carrying out a study course, we should have courage to look difficulty in the face. (CLEC) (TEMPORAL)
- 17. <u>While</u> the college leavers have to go to interview [wd3, 1-] with some companies to find jobs themselves, just as people in Britain do. (CLEC) (ADVERSATIVE)
- 18. Restaurant A lies in the suburb and it is small in size. While Restaurant B is in the center of the city and it is large. (CLEC) (ADVERSATIVE)

- 19. Spring is ranny [wd7, 1-] season till we greet summer. That indicates less time for outdoor games to me. **While** winter is too cold to have sweat all-over my back and face. (CLEC) (ADVERSATIVE)
- 20. <u>While</u> admiring the moon, people like to eat a tradictional [fm1,-] Chinese food--mooncake. (CLEC) (TEMPORAL)
- 21. All things were served by yourself, including dinner set, kettle, tea, you need to take they to your table which you want. While GUFL Restaurant are much bigger, it has twenty-four or five tables totally. (CLEC) (ADVERSATIVE)
- 22. <u>While</u> walking with him on the streets in downtown, you won't find it inordinary [fm2, 1-] to see him greeting his friends one and another. (CLEC) (TEMPORAL)
- 23. While thinking of that, I blamed myself for my carelessness. (CLEC) (TEMPORAL)
- 24. While the undergraduate are all attend and listen attentively to the lecture. (CLEC) (TEMPORAL)
- 25. <u>While</u> leaving the dining-room, I feel got in the cold winter wind.Burdened with three pieces of heavy baggage. (CLEC) (TEMPORAL)
- 26. for [fm3,-] example, good weather makes people happy and engetic [fm1,-] .  $\underline{\text{While}}$  bad weather makes people depressed and sad. (CLEC) (ADVERSATIVE)
- 27. <u>While</u> college graduates are automatically allocated or easily find a job by [fm1, -1] themself, access to a new job. (CLEC)(TEMPORAL)
- 28. There is a fairly [wd3, 1-]story about a fairly [fm1,-] who flied to the moon along after eating some kind of medicine. While her husbant [fm1,-] couldn't take his chare and remained on the earth. (CLEC) (TEMPORAL)
- 29. If they succeed in finding one, the college will not meddle in, nor will the government. **While** if they fail, the college will help them . (CLEC) (TEMPORAL)
- 30. In the past, the graduates were allocated jobs by our government. The school leavers did not worry about the employment. While nowadays, the school and college leavers have many choices. (CLEC) (ADVERSATIVE)
- 31. The nice moonlight will remind people a lot of romantic legends, such as "fairy Chang'e Fly [fm3, 1-] to the Moon". While nowadays, Mid-autumn [fm3, 1-]Festival comes to be one of the best holidays for family reunion. (CLEC) (ADVERSATIVE)
- 32. <u>While</u> eating and drinking, they will tell some very historian [wd2, 1-] and interesting stories about the full-moon, the lady of the moon and others. [sn8,s] (CLEC) (TEMPORAL)
- 33. While playing table tennis, we have to react quickly and accurately. (CLEC) (TEMPORAL)
- 34. It seems that in Islamic countries, women's human [wd5,1-1] bodies are regarded as indecency. **While** in some regions of [wd3,1-1] Africa, a woman have [vp3,2-] to wear rings around their [pr3,s-] neck from a little girl [wd7,s-] and add [vp3,s-] rings every year so as to make the neck longer a (CLEC) (ADVERSATIVE)
- 35. <u>While</u> the industrialization brings people abundant goods for consumption, the waste discharged by the factory are [vp3,s-] worsening our living environment. (CLEC) (ADVERSATIVE)
- 36. <u>While</u> some people are doing things, the first thought they have is whether it is good to them or whether they can benefit from it. (CLEC) (TEMPORAL)
- 37. <u>While</u> countless people worried [vp6,s-] about and work hard on [pp1,-]protecting the ecology, some persons still continue to do harm to the environment for their benefit. (CLEC) (CONCESSIVE)
- 38. While we are revelling in the advanced facility and enjoying the modern life, can we keep our brain clear enough to realize that the nature is calling out for us to protect the environment? (CLEC) (TEMPORAL)

- 39. <u>While</u> Martin Luther King died with his great dream thirty years ago in Losangel [fm1,-] a fierce racial conflict broke out for the same reason King worried about. (CLEC) (TEMPORAL)
- 40. In the city, before you go to school, you can receive pre-school education and utmost care from the nursey [fm1,-] or kindergarten. While in the countryside, you'll be refused to be accepted by school until you are at the age of 7. (CLEC) (ADVERSATIVE)
- 41. There [fm1,-] funerals don't exist the atomosphere [fm1,-] of sadness usually in Chinese funerals. **While** China doesn't have a strong religious perspective.[sn2,s] (CLEC) (ADVERSATIVE)
- 42. And the U.S. [sn9, s] after several such cases, is also calling for law revision. While in China, where the national conditions are more complex, the problem calls for prudent solution. (CLEC) (ADVERSATIVE)
- 43. President Clinton declared that man will cure AIDS in ten years. While some scientists said, cancer won't be incurable 5 years later. (CLEC) (ADVERSATIVE)
- 44. <u>While</u> euthanasia is more and more popular and even legalized in some countries, it still remains a fresh phenomenon in China. (CLEC) (CONCESSIVE)
- 45. Futhermore [fm1,-], murdering seriously influence [wd3, 1-] social order. While euthanasia is different from murdering.[sn2,s] (CLEC) (ADVERSATIVE)
- 46. <u>While</u> we were appreciating the most bright [aj3,-1] full moon in this year, we were enjoying all kinds of delicious things we bought [vp6, s], talking, singing and dancing like any other people. (CLEC) (TEMPORAL)
- 47. Many other countries, such as Switzerland, Norway, and Germany have adopted similar approaches. **While** in China, time is not ripe for drawing up laws for euthanasia because the concept will require complicated changes. (CLEC) (ADVERSATIVE)
- 48. The government has to build new prisons to hold the games of the policemen. While the population is increasing and [wd5,s-] the rate of crime is also increasing. (CLEC) (TEMPORAL)
- 49. After many cases like this one, the American are going to make euthanasia legalized. While in China, euthanasia is quietly being practised in some urban areas despite a lack of legal protection. (CLEC) (ADVERSATIVE)
- 50. Murder is conducted to the interest of the killer against the will of the victim. While mercy killing is done to end the pain of those sufferers so that they can be relieved from constant anguishes of life. (CLEC) (ADVERSATIVE)
- 51. <u>While</u> listening, or, sometimes after listening, students are required to finish certain tasks related to the recording. (CLEC) (TEMPORAL)
- 52. Murder is an act of taking away one's life unreasonably, which violates morality. While mercy killing is an act of helping a person to shorten the painful process of death, which is admitted by morality. (CLEC) (ADVERSATIVE)
- 53. While I was in Junior 3, in 1988, my grand-parents who had been living in Taiwan Since 1949 were allowed to come to mainland to visit their relatives. (CLEC) (TEMPORAL)
- 54. While you are studying, you must become sophisticated. (CLEC) (TEMPORAL)
- 55. While he roaved [fm1,-], I went on mewing [wd3,-]. (CLEC) (TEMPORAL)
- 56. <u>While</u> talking about learning English, friends always wonder why I could get higher scores when I hadn't done many exercise. (CLEC) (TEMPORAL)
- 57. Some regard it as gaining wealth and status. While others consider it as a symbol of honor and ability. (CLEC)(ADVERSATIVE)
- 58. At first, developing countries' life expectancy ranges [wd3,s-] from 40 years old in 1960 to 60 years

- old in 1990. While developing countries' Infant [fm3,1-1] mortality [fm1,-] reduces [vp1,s-] 100 deaths per 1,000 births in 1990 than infant mortality 200 deaths per 1,000 births in 1960. (CLEC) (ADVERSATIVE)
- 59. They spend their most time playing football, seeing the films and so on. While their study are forgotten. (CLEC) (ADVERSATIVE)
- 60. While we run to restaurant hurrily [fm2,-], finding there is no food already. [sn2,-] (CLEC) (TEMPORAL)
- 61. <u>While</u> he saw Tom [np4,-2] left eye black and bruised, Peter was in a rage at once. He jumped out of the armchair and decided to wait for Bob at Bob's home. (CLEC) (TEMPORAL)
- 62. While Peter was delighting [wd2,-], the boy stood up, jumped to hit back hard and ran away immediately. (CLEC) (TEMPORAL)
- 63. Of couse [fm1,-], some people do not want to change their job only because they are afraid of not finding a new job. **While**, other people like to change their job frequently. (CLEC) (TEMPORAL)
- 64. From 1960 to 1990 the life expectancy in developing countries raised [vp1,s-] from 40 years old to
- 60 years old. While the infant mortaility [fm1,-] dropped from 200 to 100 deaths per 1,000 births. (CLEC) (ADVERSATIVE)
- 65. While we had [vp6,2-6] a good lunch, we sang highly [wd3,10-0]. (CLEC) (TEMPORAL)
- 66. From antiquity to today, many people loved rain. [cj1,0-4] While I don't like it. [sn2,s] (CLEC) (ADVERSATIVE)
- 67. While I was taking out the money, a woman came up. (CLEC) (TEMPORAL)
- 68. While we walked along the Shang Jiu Road, we saw there were many people stood [vp4,6-9] around a stage of Literature d art radio station, we also saw a singer singing on it. (CLEC) (TEMPORAL)
- 69. While I sit down, the bell rant [fm1,-] again. (CLEC) (TEMPORAL)
- 70. <u>While</u> I was young, I didn't go out because I was afraid the other children would fighten [fm1,-] me. (CLEC) (TEMPORAL)
- 71. While you are at school or walking home. Your body is burning up 100 calories an hour. When playing football or basketball. [sn9,1-] You [fm3,1-] might be using 400calories an hour. (CLEC) (TEMPORAL)
- 72. <u>While</u> people in other countries were trying to catch wild animals, farmers in China were developing the science of agriculture. (CLEC) (ADVERSATIVE)
- 73. While we were boating, we were eating some fruit and ice- cream. (CLEC) (TEMPORAL)
- 74. While having breakfast, I watch TV or listen to the radio for the news. (CLEC) (TEMPORAL)
- 75. The maximim [fm1,-] [wd3,s-] of the life expectancy rised [fm2,-] from 40 years old in 1960 to 60 years old in 1990. [sn9,-s-] **While** the infant mortaility [fm1,-] descended from 200 deaths per 1000 births in 1960 to 100 in 1990. (CLEC) (ADVERSATIVE)
- 76. Secondly, infant mortality [fm1,-] is 200 deaths per 1,000 births in 1960. While in 1990 it [wd4,-s-] down to 100 deaths per 1,000 births, [sn9,s-] from this we can see that infant mortality [fm1,-] decreases [vp1,-2] 50 per [wd4,2-2] if [wd3,3-2] it [wd4,4-] before. (CLEC) (ADVERSATIVE)
- 77. While they were putting out the fire together, the firemen arrived. (CLEC) (TEMPORAL)
- 78. In 1960 life expectancy in developing countries is 40 years old, and Infant [fm3,1-1] mortality [fm1,-] is 20%. While in 1990 Life [fm3,1-1] expectancy is changed into 60 years old, and Infant [fm3,1-1] mortality [fm1,-] is turned into 10%. (CLEC) (ADVERSATIVE)
- 79. In 1960, life expectancy is 40 years old and infant mortaility [fm1,-] is 200 deaths per 1,000 births.

- <u>While</u> the former is 60 years old and the latter is 100 deaths per 1,000 births in 1990. (CLEC) (ADVERSATIVE)
- 80. Especially, if you have studies [vp9,1-2] some certain subjects, you must want to do a relative job to testify how do you study. [sn8,s-] **While** [cj1,-s], [sn9,s-] other people prefer to change [vp1,2-2] their jobs frequently. (CLEC) (ADVERSATIVE)
- 81. In 1960, the life expectancy was 40 years old, and the infant mortaility [fm1,-] was two hundreds deaths per 1,000 births. While in 1990, it is reported that the life expectancy was sixty years old and the infant mortaility [fm1,-] was 100 deaths per 1,000 births. (CLEC) (ADVERSATIVE)
- 82. In 1960, the life expectancy of the developing country [np6,s-] is 40 years old. While in 1990, it is about 60 years old. (CLEC) (ADVERSATIVE)
- 83. In 1960, life expectancy only have [vp3,3-] forty years [cc1,-2] of age, but it rose to sixty years [cc1,-2] of age. While infant mortaility [fm1,-] have [vp3,2-] a great change. [sn2,s-] (CLEC) (ADVERSATIVE)
- 84. To life expectancy, the average age was 40 years old in 1960, however [wd3,s-] 60 years old in 1990. **While** to infant mortality, in 1960, it reached 200 deaths per 1,000 births, but to [wd3,1-1] 1990, it decrease by 50%. (CLEC) (ADVERSATIVE)
- 85. That is to say, it will [vp6,-s-] increase [vp1,-6] 20 years than [wd3,s-] that of 1960, when life expectancy is [vp6,6-] 40 years old. **While** the infant mortality in the developing country [np6,s-] in 1996 is 200 deaths per 1000 births. (CLEC) (ADVERSATIVE)
- 86. Some one settle [vp3,1-] for the same kind of job, because they [pr3,s-] like this Job-Hopping [fm1,-] very much. While someone like [vp3,1-] to change their job frequencely [fm2,-], because they interest in different Job-Hopping [fm1,-], [sn2,s] when he work [vp3,1-] on a job for a long time, he will tired [vp9]. (CLEC) (ADVERSATIVE)
- 87. They think they can't find a job better than it. While some people want to change their job constantly. [sn2,s] (CLEC) (ADVERSATIVE)
- 88. While, [cj1,-s] some people don't think like this way. (CLEC) (ADVERSATIVE)
- 89. One letter only [ad1,-] can Send [vp7,-] to one person. While one email can send [vp7,-] to many people. (CLEC) (ADVERSATIVE)
- 90. While he was in prison, he wrote a book that made him adored by many people. (CLEC) (TEMPORAL)
- 91. Several days later the letter will arrive [vp1,-] the destination. While sending email is simper and much faster. (CLEC) (ADVERSATIVE)
- 92. <u>While</u> the econimic [wd2,-] of society are developing quickly, a lot of fake commodities are borning [fm1,-]. (CLEC) (TEMPORAL)
- 93. <u>While</u> my parents didn't know how [wd3,-] to do, the army man [wd3,-] turned his head. (CLEC) (TEMPORAL)
- 94. Sometimes they may even do something greatly harmful to the society because of their prejudice. While the third kind of people think nothing is worthy for them to be faithful all their lives. (CLEC) (ADVERSATIVE)
- 95. Some people like [vp1,-1] do a [np7,-2] same job from start to the end. They have interesting in doing the same work. They can enjoy the success from doing the same work better and better. While some others often like [vp1,-1] change the job. (CLEC) (ADVERSATIVE)
- 96. <u>While</u> maintaining the compulsory military system, we also need to convert part of the army into [wd4,s-] professional field. [t7-4] (CLEC) (TEMPORAL)

- 97. Some people like taking up a job from the start to the end. Because they want to live a stable lives [np3,2-] and don't want to take on danger. [sn2,s] **While** other people often change the job, because they think that they want to find the job which are fit for themselves, to extert [fm1,-] their ingennity [fm1,-]. [sn7,s] (CLEC) (ADVERSATIVE)
- 98. Some people like to do a [np7,-2] same job all life. Because they can become experienced when they work a job [cc3,2-] for a long time. So that they can get up [wd3,1-]. **While** the others like to change their jobs often. [sn2,s] (CLEC) (ADVERSATIVE)
- 99. They believe that where there is a will there is a way and that success belongs to those who can stick to his cause with perseverance spirit [wd5,1-]. While, the others are fond of changing jobs constantly. (CLEC) (ADVERSATIVE)
- 100. <u>While</u> some people like to change their jobs constantly because they find every new job offered them a completely different field. [sn2,s] (CLEC) (ADVERSATIVE)

### **Appendix 2.3 Final** *while-***clauses in BAWE-E (Sample=100)**

- 1. Generally the public respond to outrage <u>while</u> the experts are more rational and respond to hazards. (BAWE-E) (ADVERSATIVE)
- 2. Egypt was the case study illustrating Jewish contempt for the service to divine images, <u>while</u> the people of Canaan were an example of 'loathsome practices ... acts of sorcery and unholy rites'. (BAWE-E) (ADVERSATIVE)
- 3. It gets even more sinister concerning the 'undesirable' children; while the 'desirable' children are taken by officers to nurseries run by the state, the 'undesirables' will be taken away and secretly disposed of. (BAWE-E) (ADVERSATIVE)
- 4. Images C and D are both Amulets portraying Isis, Image C again shows the crown unique to Isis, from the Saite Period; while Image D shows Isis with the solar disk and cow horns that she acquired from Hathor during the 18 th Dynasty. (BAWE-E) (ADVERSATIVE)
- 5. The basal layer (stratum 4) contained 99% of the hippopotamus bones while stratum 2 contained only 1% but also included the majority of the bird bones and marine invertebrates (Simmons 1991: 859). (BAWE-E) (ADVERSATIVE)
- 6. Martin was an MP who supported Liverpool, Canning, Goderich Wellington and Grey, claiming 'My Party is the King, and the persons he may think fit to appoint as his ministers will always have my support **while** I am in office'. (BAWE-E) (TEMPORAL)
- 7. Another notable difference between the Hellenica and the Life of Agesilaos on this particular story is that Plutarch credits Lysander with being the driving force behind Agesilaos' claim to the kingship, **while** Xenophon tries to create the impression that it was all down to Agesilaos' own ambition and determination, with Lysander helping him only in arguing against the oracle which advised the Spartans to be aware of the lame kingship. (BAWE-E) (ADVERSATIVE)
- 8. Whether you are 6 or 60, the sight of seven sword-wielding skeletons battling with three horror struck Argonauts is guaranteed to have your eyes popping out of your head <u>while</u> transporting your imagination to a world where the impossible does happen. (BAWE-E) (TEMPORAL)
- 9. The Bacchae and The Frogs both won first place, while Peace came second, in each play's respective festivals. (BAWE-E) (ADVERSATIVE)
- 10. The sounds /b d g/ are produced when the voice onset time coincides with the release, **while** /p t k/ are produced when voicelessness continues after the release. (BAWE-E) (ADVERSATIVE)
- 11. Tesco, however, managed far more extensive investments **while** generating record profits. (BAWE-E) (TEMPORAL)
- 12. Mina Harker embodies all the good womanly virtues, **while** Lucy Westenra is a voluptuous blood-lusting animal. (BAWE-E) (ADVERSATIVE)
- 13. For example formal language will be preferred in ceremonial occasions while conversations with friends will be taken place in a casual way (Wardhaugh, 2002). (BAWE-E) (ADVERSATIVE)
- 14. It will be examined <u>while</u> discussing experiments of two chimps, Washoe and Kanzi. (BAWE-E) (TEMPORAL)
- 15. However as it states at the beginning semantics between words is another important element <u>while</u> considering language acquisition. (BAWE-E) (TEMPORAL)
- 16. Meyer-Levy's previous research (1988) demonstrated that females tended to explore more detailed

- information before making decisions, <u>while</u> males relied on more objective cues, only available information, and their own opinions. (BAWE-E) (ADVERSATIVE)
- 17. In the past, there were more academics cling to the theory that consumers are passive recipients of commercial information and promotional messages (Varey, 2001), **while** today, consumers become much more independent and sophisticated in using a wide range of marketing communication tools to acquire the information associated with their consumption activities. (BAWE-E) (ADVERSATIVE)
- 18. Sterck (1997) describes female-biased dispersal in Thomas langurs (Presbytis thomasi) and concludes that the proximate cause is infanticide avoidance **while** the ultimate cause is likely to be inbreeding avoidance. (BAWE-E) (ADVERSATIVE)
- 19."Is this a poem?" may be the first question one can ask <u>while</u> discovering "The first men on Mercury" by Edwin Morgan. (BAWE-E) (TEMPORAL)
- 20. Both sections underwent periods of definite economic progression while issues of inequality remained an undercurrent. (BAWE-E) (ADVERSTAIVE)
- 21. Conversely the rationality of the optimal forager is installed at the every heart of nature, **while** the specifically human domain of society and culture is seen as a source of negative influence, causing the behaviour of the forager to deviate from the theoretical optimum. (BAWE-E) (ADVERSATIVE)
- 22. As a result, and because I didn't want to jeopardize my routine, I determined he would only be responsible for the ice-cream orders, **while** I would prepare the rest. (BAWE-E) (ADVERSATIVE)
- 23. Similarly, it is not surprising that coordination and harmonisation of tax laws have progressed at a far slower pace than many other issues within EU Law, for, comparatively, its member-states may be as reluctant as citizens **while** considering whether to pass tax laws that impair their financial situation. (BAWE-E) (TEMPORAL)
- 24. It is thus, that war is assumed to be imminent in the international system, while peace and cooperation are not considered obvious possibilities. (BAWE-E) (ADVERSATIVE)
- 25. ECJ decided also that CFI have erred in law, while rejecting the Commission's statement as to the adoption by the merged company a conduct possibly resulting in leverage. (BAWE-E) (TEMPORAL)
- 26. The King defended its imperial monarchy by repeatedly affirming that they were God's representatives on earth <u>while</u> the common lawyers employed arguments of faith, love and justice that were based upon Judaeo-Christian theology. (BAWE-E) (ADVERSATIVE)
- 27. Costs can be of a direct nature, such as those related to refugee status determination, subsistence, housing, schooling and health, <u>while</u> indirect costs such as social integration are more difficult to quantify. (BAWE-E) (ADVERSATIVE)
- 28. They were given monthly allowances <u>while</u> looking for work, and allowances for education at many levels, such were the demands for trained men within the post-war economy. (BAWE-E) (TEMPORAL)
- 29. Alienated labour remains an external critique of the condition of labourers in predicament, while the labour theory of value points out clearly the decisive role of production rather than the market equilibrium in determining the value of commodities by arguing that 'substance of value is abstract labour'. (BAWE-E) (ADVERSATIVE)
- 30. Therefore, was described as the only one, that it is possible to rely upon, on international level, moreover which might be discussed by the foreign courts **while** dealing with conflict of laws issues. (BAWE-E) (TEMPORAL)
- 31. The first is simply the linguistic meaning of the sentence, while the second is the meaning of the proposition, or content of the sentence. (BAWE-E) (ADVERSATIVE)

- 32. Traditionally, dividends were predominant mechanism firms used to deliver their permanent earnings, **while** share repurchases was relatively unimportant until mid-1980. (BAWE-E) (ADVERSATIVE)
- 33. They are more or less equivalent way of paying out retained earning, while stock repurchases indeed have become an important source of payout in the recent years. (BAWE-E) (ADVERSATIVE)
- 34. So far this exposition seems to translate statements of predication faithfully, retaining its meaning **while** adapting to claims of negative predication. (BAWE-E) (TEMPORAL)
- 35. It was found from a research that both innovative and supportive subcultures have a clear positive relationship, while bureaucratic subcultures have a negative relationship. (BAWE-E) (ADVERSATIVE)
- 36. Workplace Industrial Relations Survey (WIRS) and Workplace Employee Relations Survey (WERS) have confirmed that the use of direct employee involvement (EI) has become considerably more extensive **while** the use of indirect EI has declined during the last 20 years (Cullyal. 1999; Millwardal. 2000). (BAWE-E) (ADVERSATIVE)
- 37. Ulrich, despite his natural inclination to the realm of precision and rationality, recognizes the problem that the world of feeling and emotion (which he connects with the project of morality) has long failed to make any advances within humanity, **while** science relentlessly achieves more and more. (BAWE-E) (ADVERSATIVE)
- 38. And one can't do anything mean in that condition [...] but nothing bad can happen while the condition lasts; the very moment it does happen, the stillness and clarity tear to shreds and the miraculous condition ceases". (BAWE-E) (TEMPORAL)
- 39. The former ignores the historical background of state including the state-society relations; **while** the latter neglects the nature of structure and the contribution of the globalization. (BAWE-E) (ADVERSATIVE)
- 40. The genius of Lenin was shifting immediate policy in reaction to the harsh political climate in order not to chain himself to a sinking ship as the Mensheviks had done in 1917 while maintaining the true nature of his Marxian interpretation. (BAWE-E) (TEMPORAL)
- 41. For Japan, the inherent flexibility of APEC means that it can bend the rules and protect vital interests **while** putting pressure on other countries not to discriminate against its products. (BAWE-E) (TEMPORAL)
- 42. It is said to have a dual advantages as it will strengthen the introduction of a new product with a "power pack of corporate identity" **while** at the same time reinforcing customers' awareness of all other existing brands. (BAWE-E) (TEMPORAL)
- 43. In helping to gain access to posts in the court ceremonial hierarchy for those lacking a noble background, Pompadour set in place the potential for future political instability, **while** simultaneously sealing her unpopularity among the established ministerial world at Versailles. (BAWE-E) (TEMPORAL)
- 44. Through clever manipulation Cortés is able to win friends in Naravez' camp while simultaneously planning an attack. (BAWE-E) (TEMPORAL)
- 45. His only novel takes its inspiration from both Yeats's The Stolen Child, in which 'the 'real' person spirited away by fairies remains youthful and carefree, while the simulacrum ages and withers away', as well as his highly nationalistic play, Cathleen ni Houlihan, in which the 1798 Rebellion is reimagined. (BAWE-E) (ADVERSATIVE)
- 46. His melancholy outburst which takes place while he is sitting beneath the elder-tree and smoking a

- pipe is abundant with visual humour. (BAWE-E) (TEMPORAL)
- 47. Scandinavian countries place a higher value on quality of life and social needs, European and Anglo-American on productivity, efficiency and self-actualisation <u>while</u> the Chinese in collectivism and community rather than individualism. (BAWE-E) (ADVERSATIVE)
- 48. In 2005, Brazil should look to the Far and Middle East and the emerging Eastern European markets for new export markets while the dollar recovers. (BAWE-E) (TEMPORAL)
- 49. The first estimate compared first class rail with inside coach, **while** the second compared second and third class rail with outside coach. (BAWE-E) (ADVERSATIVE)
- 50. The rich countries consume 45% of all meat and fish **while** the poorest fifth only 5%; the rich consume 58% of total energy, the poorest fifth less than 4%. (BAWE-E) (ADVERSATIVE)
- 51. Used in this sense one cannot, even at a formal level, reform the privity doctrine <u>while</u> leaving untouched the rule that consideration must move from the promisee. (BAWE-E) (TEMPORAL)
- 52. Macrae et al 1994 says that stereotyping enables us to adopt a large amount of information on a daily basis **while** saving us precious mental resources as it takes too much energy to define every individual based on their unique characteristics. (BAWE-E) (TEMPORAL)
- 53. In this play the actors played the parts of the Auschwitz dead <u>while</u> the audience were representatives of the living, witnessing a life they could not partake in. (BAWE-E) (ADVERSATIVE)
- 54. If The Constant Prince asked the question 'how far can the relationships of actor and audience change **while** still remaining theatre?' then the answer came in the defining moment of poor theatre Apocalypsis Cum Figuris. (BAWE-E) (TEMPORAL)
- 55. The action takes place in the kitchen containing the 'metal utensils' (Pg.1) suiting the servant's workplace <u>while</u> the arched entrance to the right and the grand garden in the background are representative of the high class environment the servant's work in. (BAWE-E) (ADVERSATIVE)
- 56. However, the same schools of thought have traditionally ascribed men to the public areas of "non-domestic, economic, and political life" while seeing women as better suited to private life. (BAWE-E) (TEMPORAL)
- 57. There are predominantly Pakistanis, Indians and Turkish Cypriots in Britain, while France has a variety of Algerians, Moroccans and Tunisians. (BAWE-E) (ADVERSATIVE)
- 58. This is epitomized during United States' President Clinton's administration when it applied its "rogue state" doctrine of containment to radically Islamist states such as Iran and Sudan <u>while</u> steadfastly supporting Egypt and Tunisia in their brutal repression of all shades of Islamic activism in the name of eradicating "terrorism". (BAWE-E) (TEMPORAL)
- 59. External factors merely aggravated the internal declining state and <u>while</u> internal changes could have been adopted to meet the new circumstances, the extreme conservative ideology and attitude of the Ottomans made it impossible. (BAWE-E) (ADVERSATIVE)
- 60. On the one hand, Sofianosal. (1990) found evidence of CR in those loans not agreed under commitment in the US between 1973 and 1987, **while** Ghoshal. (2000) agreed with the CR hypothesis in less-developed countries. (BAWE-E) (ADVERSATIVE)
- 61. In such a situation, banks biased their portfolios towards those assets denominated in US\$ dollars **while** the public swapped their deposits from Arg\$ to US\$ dollars to preserve the purchasing power of their respective assets under a devaluation scenario. (BAWE-E) (ADVERSATIVE)
- 62. The benefit of this mechanism is that the firms with a high share of tradable production will be able to find funding sources under better conditions (e.g., lower interest rates), reducing the costs of capital and positively affecting domestic production **while** the currency risk is properly hedged. (BAWE-E)

#### (TEMPORAL)

- 63. Nunziata finds that bargaining coordination is significantly decreasing wages, <u>while</u> employment protection and benefit replacement ratios have a significantly positive relationship to wages. (BAWE-E) (ADVERSATIVE)
- 64. If we assume share of national income received by capital ( $\hat{\mathbf{L}}$ ) and share of wages in national income ( $\hat{\mathbf{L}}$ ) are equal (each 0.5), then capital accumulation can be calculated as 0.35%, while growth in labour force was 0.15%. (BAWE-E) (ADVERSATIVE)
- 65. Another carnelian intaglio, and also a coin depicts Sol, implying regeneration, while other coins show figures associated with the 'concept of victory over death' like Hercules and Mars. (BAWE-E) (ADVERSATIVE)
- 66. For example, in the Alemannic region of south west Germany, there are currently 'only a few fragmentarily excavated settlements', <u>while</u> vast numbers of graves with 'hundreds of thousands of grave goods' are available for study. (BAWE-E) (ADVERSATIVE)
- 67. She lures him in to her tent and blinds him, <u>while</u> at the same time the chorus of Trojan women kill Polymestor's two children. (BAWE-E) (TEMPORAL)
- 68. Dido, manipulated by Venus, loves Aeneas and threatens the building of a new Troy, as Helen brought about the destruction of the old one, **while** Lavina is seized and controlled, fought over by two warriors. (BAWE-E) (TEMPORAL)
- 69. Another notable difference between the Hellenica and the Life of Agesilaos on this particular story is that Plutarch credits Lysander with being the driving force behind Agesilaos' claim to the kingship, while Xenophon tries to create the impression that it was all down to Agesilaos' own ambition and determination, with Lysander helping him only in arguing against the oracle which advised the Spartans to be aware of the lame kingship. (BAWE-E) (ADVERSATIVE)
- 70. Regarding the henge itself, the decrease in the height of the bank, Watson says, accentuates the size of the stones of the inner circles, **while** the symmetry between the bank and the distant hills provides a surrogate at points within the monument where the bank is hidden (Watson, 2001: 302). (BAWE-E) (ADVERSATIVE)
- 71. This was partly initiating or at least encouraged by some governments as the new non-state, in particularly the private sector was supposed to share the burden of conducting diplomacy, **while** trying to stay as agenda setters. (BAWE-E) (TEMPORAL)
- 72. It can be easily seen that language use was identified as a very important factor and the difference is that males thought the language used at work was the second important factor just less than the age influence, **while** females thought a lot of overall language use. (BAWE-E) (ADVERSATIVE)
- 73. Some uses localization of brain damage such as Broca aphasia (frontal, where Broca's area is associated with serial organization and motor programming), Wernicke aphasia (temporal, where the Wernicke's area is associated with spoken language comprehension) or conduction aphasia (parietal), while others refer to the speech pattern, using the dichotomy of fluent and non-fluent aphasia, as well as grammatic and agrammatic aphasia. (BAWE-E) (ADVERSATIVE)
- 74. Acquisition of speech comes naturally during childhood, <u>while</u> reading and writing has to be learned through formal and informal teaching. (BAWE-E) (ADVERSATIVE)
- 75. In the case of an exchange error found in LOWING THE MORN (mowing the lawn), the L and M was mistakenly copied, **while** a repetition error in BEEF NEEDLE (b eef n oodle), the EE was not deleted after being copied. (BAWE-E) (ADVERSATIVE)
- 76. For example, the 'Widow of Ephesus' scene is an ironic response to the tragedy of Dido in the

- Aeneid, <u>while</u> the whole of the original Satyricon was a parody of the Odyssey (Dick 1981: 150). (BAWE-E) (ADVERSATIVE)
- 77. At the same time military campaigns were continuing, and Brunt has pointed out that "prolonged absence on campaigns... must have ruined small farmers" (Brunt 1971: 77), while the Hannibalic War had left the land of others in ruin. (BAWE-E) (ADVERSATIVE)
- 78. Tacitus remarked that "a jealous fear that rivals would outpace them in Vitellius' affections induced them to ruin Vitellius himself" (Tac.Hist. 2.101), **while** Levick has also argued that the strength of the Flavians helped cause Caecina's desertion (Levick 1999). (BAWE-E) (ADVERSATIVE)
- 79. The Bacchae and The Frogs both won first place, <u>while</u> Peace came second, in each play's respective festivals. (BAWE-E) (ADVERSATIVE)
- 80. Austin and Vidal Naquet have pointed out that "from the time of the Peloponnesian War one finds the beginnings of a greater specialization of the functions; the 'demagogues' in Athens formulated the policy of the state, **while** its execution was entrusted to others. (BAWE-E) (ADVERSATIVE)
- 81. Consensus finding Multilateral trade negotiations in the WTO with its 140 members are often considered to be slow and cumbersome, <u>while</u> RTA negotiations involving only a small number of countries are considered to be comparatively easy (Anderson, 2005). (BAWE-E) (ADVERSATIVE)
- 82. Grant and Lambert (2005) found for Africa RTAs only in 1 out of 9 cases trade diversion to exceed trade creation, **while** APEC members created trade across all commodities. (BAWE-E) (ADVERSATIVE)
- 83. Generally, coordination is more difficult for those favouring free trade than those opposing it, as gains from liberalisation are widely distributed, uncertain, difficult to quantify, and perhaps longer term, <a href="https://www.while">while</a> losses are immediate, visible and fall on specific and identifiable sectors (Fernà ndez, 1997). (BAWE-E) (ADVERSATIVE)
- 84. In case of NAFTA, the US commits to continue its relatively open trade policy with Mexico, while Mexico commits to improving labour and environmental standards so that both sides benefit. (BAWE-E) (ADVERSATIVE)
- 85. The sounds /b d g/ are produced when the voice onset time coincides with the release, while /p t k/ are produced when voicelessness continues after the release. (BAWE-E) (ADVERSATIVE)
- 86. Odysseus has to defeat many different creatures **while** struggling to get home to Ithaca. (BAWE-E) (TEMPORAL)
- 87. In the lenis consonants, it is thought that, due to the air resistance caused by voicing, the frication is less intense, while the lack of voice in the fortis allows more air to be available during the period of frication. (BAWE-E) (ADVERSATIVE)
- 88. Farmers' and researchers goals seem to be irreconcilable, because when experimenting, farmers seek to develop solutions for the present, ever changing conditions of their fields, <u>while</u> researchers look for general outcomes applicable in any scenario and any time (Scoones and Thompson, 1994; Braun et al, 2000). (BAWE-E) (ADVERSATIVE)
- 89. It can be easily seen that language use was identified as a very important factor and the difference is that males thought the language used at work was the second important factor just less than the age influence, **while** females thought a lot of overall language use. (BAWE-E) (ADVERSATIVE)
- 90. Intermittent informal care is carried out by most families, <u>while</u> long term informal care is carried out by approximately 1.3 million people who spend more than 20 hours a week caring for a dependant relative. (BAWE-E) (ADVERSATIVE)
- 91. The aim of the strategy is that the possible future consumer will start liking the product and will

- remember to buy it while shopping for cosmetics next time. (BAWE-E) (TEMPORAL)
- 92. For instance, a moderate volume gives the impression of pleasantness and happiness, **while** a loud volume will show dominance and confidence. (BAWE-E) (ADVERSATIVE)
- 93. However, we need to take into account the regional political and economic circumstances while making such generalization. (BAWE-E) (TEMPORAL)
- 94. It is crucial to take into account all three of them <u>while</u> analyzing social relations, because each is contributing from a different angle to the debate. (BAWE-E) (TEMPORAL)
- 95. In terms of perception, fully voiced [b d g] (as occurs in French) are heard as slightly unusual /b d g/, while unaspirated initial [p t k] are also heard as being closest to /b d g/ despite the absence of voicing (Reeds and Wang, 1961). (BAWE-E) (ADVERSATIVE)
- 96. On her husband Leonidas' departure for Thermoplyae, **while** urging him to show himself worthy of Sparta, she asked what she should do. (BAWE-E) (TEMPORAL)
- 97. Toilets, kitchens and cellular offices have incorporated mechanical extract systems that expel waste air **while** recycling any heat through a heat exchanger. (BAWE-E) (TEMPORAL)
- 98. Tannen (1990: 42) has developed this theory saying 'women speak and hear a language of connection and intimacy, **while** men speak and hear a language of status and independence'. (BAWE-E) (ADVERSATIVE)
- 99. Lesley Milroy (1999) gives an interesting argument here **while** comparing the situation in the United States. (BAWE-E) (TEMPORAL)
- 100. It seems true that the definition of Standard English is starting to appear gradually <u>while</u> looking at Trudgill's ideas. (BAWE-E) (TEMPORAL)

# Appendix 2.4 Final while-clauses in CLEC (Sample=100)

- 1. Online education is a new mode of education, <u>while</u> offline education is a traditional one. (CLEC) (ADVERSATIVE)
- 2. Though Roy had to go to the front the next day, he was quite optimistic to meet Myra again, while Myra was more or less pessimistic. (CLEC) (ADVERSATIVE)
- 3. Grandpa quickly took out a towel and began drying my hair while I felt a tempting smell from the kitchen. (CLEC) (TEMPORAL)
- 4. Science is the understanding of the natural world, **while** language is concerning [vp5,2-4] about the social issues. (CLEC) (ADVERSATIVE)
- 5. His father was a superior officer of the Kuomindang government, <u>while</u> he was influenced by the progressive ideas. (CLEC) (ADVERSATIVE)
- 6. This dream has been both long [wd3,5-] and hard [wd3,7-] for us, while, in the end, the reality in the wake of the dream is sure to be promising and encouraging. (CLEC) (ADVERSATIVE)
- 7. By making a comparative study, we could see that language needs imitation, <u>while</u> science needs creation. (CLEC) (ADVERSATIVE)
- 8. All kinds of beautiful lanterns gathering together shining [vp1, 1-] their beautiful lights while people admire the moon. (CLEC) (TEMPORAL)
- 9. People celebrate Christmas to memorize [wd3,4-1] Jesus, <u>while</u> people celebrate the Spring Festival to welcome a new year. (CLEC) (ADVERSATIVE)
- 10. Most people use this convenience to do good things, while some others are on [pp1,-2] the opposite. (CLEC) (ADVERSATIVE)
- 11. Birth is usually anticipated with excitement and joy, while the reality of death is often [sn8,s] avoid as best one can. (CLEC) (ADVERSATIVE)
- 12. Murder brings sadness and scandle [fm1,-] to the society, while euthanasia brings goodness to the victim and his or her families. (CLEC) (ADVERSATIVE)
- 13. People usually have a warm welcome to the birth, while try their best to avoid death. (CLEC) (ADVERSATIVE)
- 14. It sets asides a time for Chinese people to reunite **while** busying making living outside. (CLEC) (TEMPORAL)
- 15. Murder is based on the intention to harm others, **while** euthanasia is to help others. (CLEC) (ADVERSATIVE)
- 16. Second [wd3,1-] , our country is an undeveloped country, while some other western countries are developed counties. (CLEC) (ADVERSATIVE)
- 17. But my father will go to London next week on business, **while** my brother [vp3,-] have to stay at [pp2,-1campus. (CLEC) (ADVERSATIVE)
- 18. During the racing, the contenders [sn9, s], strain at racing, **while** the crowds on the watersides are screaming and cheering. (CLEC) (TEMPORAL)
- 19. Men and women try their best to win the race, **while** children would cheer at the banks of the river. (CLEC) (ADVERSATIVE)
- 20. People enjoy their lives, <u>while</u> the nation is booming as one of Asia's four little dragons. (CLEC) (TEMPORAL)

- 21. Institute of Chinese Medicine is very crowded, <u>while</u> here, the chefs in the dining room enjoy free time, not [,0-5] so many students visiting here. (CLEC) (ADVERSATIVE)
- 22. For the past two months, almost every afternoon, I found it hard to fan [wd3,5-] asleep while your recorder kept playing certain music. (CLEC) (TEMPORAL)
- 23. In two or three years, all graduates will have to find a job themselves, **while** at present, they are all automatically allocated with job [np6, 1-] by the government. (CLEC) (ADVERSATIVE)
- 24. The left part is dirty, made up of pieces of board, and showing its original wood color, **while** the right part is clean, bright with white wall-paper on it. (CLEC) (ADVERSATIVE)
- 25. Since GUFL is a foreign languages university, students and teachers come from every part of the world, you can hear a lot of languages and dialects spoken there, **while** in Dan Middle school, you can only hear home's dialect, and English. (CLEC) (ADVERSATIVE)
- 26. Since people are all happy to see their faraway relatives and friends who haven't seen for a long time, [sn7,s]adults often chat and eat and laugh all night, **while** children are also too exciting to sleep at the normal sleeping time. (CLEC) (ADVERSATIVE)
- 27. College leavers have to find jobs on their own, while at the same time companies can choose potential employees freely. (CLEC) (TEMPORAL)
- 28. Modern industry creats [fm1,-] various kinds of pollution, such as wast [fm1,-] water, refuse, noises and so on, <u>while</u> modern agriculture destructs [wd3,s-] [vp1,-s-] large quantity of grassland or forest into farmland, causing the erosion of soil. (CLEC) (ADVERSATIVE)
- 29. Nowadays, more and more peasants come into the cities, <u>while</u> the factories only need a certain number of workers. (CLEC) (ADVERSATIVE)
- 30. Guilin and Xiamen are both characterized by splendid natural scenery, **while** Shenzhen and Haikou are characterized by wonderful structure. (CLEC) (ADVERSATIVE)
- 31. They spend their space [fm1,-] time on the standard tennis court, while students in GIFL have their long-distance running-test on the path covered with cement. (CLEC) (ADVERSATIVE)
- 32. The roads in ZU are usually kept tidy, **while** we can often see dust on the roads in GUFL. (CLEC) (ADVERSATIVE)
- 33. Definitely it costs [cc3,-5] you much time to traveral [fm1,-] the whole ZU, while [wd4,-5] GUFL, quite a little time. (CLEC) (ADVERSATIVE)
- 34. At 5 o'clock in the morning, your radio is broadcasting "the hijack in china [fm3,-] " and " riots in Los ngelos [fm1,-] ", while I am still is bed, spending the next tormenting 2 hours. (CLEC) (TEMPORAL)
- 35. The rooms of Shi Zui Xian are well ventilated and very bright, **while** those of Yun Bei are not. (CLEC) (ADVERSATIVE)
- 36. Women had no position of their own whether inside or outside families, while men are [vp6,s-] justified to dominate the whole society. (CLEC) (ADVERSATIVE)
- 37. We enjoy these while we are doing entertainments. (CLEC) (TEMPORAL)
- 38. So slave and feudal societies were backward and poor, <u>while</u> capital [wd2,-3] and social [wd3,-1] societies developed very quickly. (CLEC) (ADVERSATIVE)
- 39. So, it appears that the average people are sweating in packed buses, <u>while</u> they are glacing [fm1,-] over streets through the dark brown window of their luxury cars. (CLEC) (TEMPORAL)
- 40. Although we must die at last, some people were cut off in the prime of their youth, **while** others lived to over one hundred. (CLEC) (ADVERSATIVE)
- 41. After several failure [np3,2-] I began to remain silence [wd2,1-] at the table with so many words of

- profound emotion on the verge of my lips, <u>while</u> my parents, sisters and brothers were fixing their eyes on the TV screen and at the same time stuffing rice and dish into their mouths. (CLEC) (TEMPORAL)
- 42. In addition, the period of enlistment is only three years, <u>while</u> professional soldiers fight until they are too old to fight. (CLEC) (ADVERSATIVE)
- 43. The term of a professional soldier is about eight years or even longer, **while** the term of a common soldier is only about three years. (CLEC) (ADVERSATIVE)
- 44. Physically, an infant may be born to be very pretty and healthy, **while** another one may be ugly or unhealthy. (CLEC) (ADVERSATIVE)
- 45. Nature is being maimed and poisoned, its groans lost in a sea of chants from thousands of triumphant machines, **while** we are enjoying ourselves and just have no time to listen to Nature's pleading. (CLEC) (TEMPORAL)
- 46. Dreaming is a kind of mental actions of human brains, <u>while</u> realization is [vp3,-2] physical activities. (CLEC) (ADVERSATIVE)
- 47. However, at the time, some people were entitled [wd3,-] the moment they were born what they might never obtain by themselves, **while** others came to the world "naturally", that is, with absolutely nothing, and had to struggle for what they deserved as human beings such as food and shelter. (CLEC) (ADVERSATIVE)
- 48. With regard to those practical knowledge, I think, we will obtain them in the real world, sooner or later, **while** we are practicing. It is not a bad thing to get a good job and earn a lot of money after graduation. (CLEC) (TEMPORAL)
- 49. Some people say [vp6,s-2] it is a great relief to terminally ill patient, while some accused that it is [vp6, s-] a murder. (CLEC) (ADVERSATIVE)
- 50. Traditionally, birth is usually anticipated with excitement and joy, while the reality of death is viewed as sorrowful thing often avoided as best one can. (CLEC) (ADVERSATIVE)
- 51. Some are injured while doing chores with their eyes on the screen. (CLEC) (TEMPORAL)
- 52. In [pp2, 1-2] the all, I think, our institute is the good place for study, **while** the Guang Dong Commercial College is the good place for entertainment. (CLEC) (ADVERSATIVE)
- 53. Man is destroying Nature and themselves [pr3,s-] <u>while</u> creating civilization. (CLEC) (TEMPORAL)
- 54. For those rich people, they surely can afford the cost, **while** those who are not rich may be deep in debt. (CLEC) (ADVERSATIVE)
- 55. Birth is usually antispated [fm1,-] with excitement and joy, while the reality of death is often avoided as best one can. (CLEC) (ADVERSATIVE)
- 56. She was totally deaf and had her very poor vision, <u>while</u> her normal intelligence would only make her more cruelly aware of her fate. (CLEC) (ADVERSATIVE)
- 57. It is unreasonable to take so much money to save those hopeless life, **while** the survivor lead a poor life. (CLEC) (TEMPORAL)
- 58. Punishment only means suffering, while rehabilitation means new life. (CLEC) (ADVERSATIVE)
- 59. They yell, laugh and applaud <u>while</u> the players try their best to row the boat fast. (CLEC) (TEMPORAL)
- 60. In another case, when a TV program reported the fatalities caused by a brand of fake wine, featuring a crippled young father who was victimized by a bottle of this evil wine, while his three children weeping around him [sn2,s-] (CLEC) (TEMPORAL)
- 61. All in all, my friends can be divided into two categories on the basis of their varied temperament:

- some are frank and enthusiastic, while the others are quiet and reserved. (CLEC) (ADVERSATIVE)
- 62. Pop Music is easy to accept [wd3,-] for its melody and words, while Folk Music is a bit too abstract. (CLEC) (ADVERSATIVE)
- 63. Second, we should be economical while we are using [vp6,s-] fresh water. (CLEC) (TEMPORAL)
- 64. Someone like [vp3,1-] to go in for a stationary work, <u>while</u> others like to change their jobs at one time. I wonder why they have the different choice. (CLEC) (ADVERSATIVE)
- 65. After some time, Miss Green, the pofessor's secretary found that the two men were not the right men while [wd3,s-] two policemen came. (CLEC) (TEMPORAL)
- 66. In 1996, life expectancy is 60 years old, while infant mortaility [fm1,-] is only 100 deaths per 1000 births. (CLEC) (ADVERSATIVE)
- 67. I didn't cross this road, while [wd3,s-] I walked across another road. (CLEC) (TEMPORAL)
- 68. In 1960, it is only 40 years old, while in 1990, it is 60 years old. (CLEC) (ADVERSATIVE)
- 69. I felt worried and anxious while waiting for the results. (CLEC) (TEMPORAL)
- 70. For me, I am ready to do some spair-time [fm1,-] job, while we [pr3,s-] are out of class. (CLEC) (TEMPORAL)
- 71. For example, drugs can be used to treat and save people, while false drugs will delay the treating time and even cause people to die. (CLEC) (ADVERSATIVE)
- 72. What we try to give you is how to be a righteous and useful person, **while** some other parents try to leave lots of money for their children. (CLEC) (ADVERSATIVE)
- 73. They help me while I meet difficulties. (CLEC) (TEMPORAL)
- 74. About ten years ago, I had the last time of swimming **while** I was spending my holiday in Beijing. (CLEC) (TEMPORAL)
- 75. In most cases, men give what they want to show their generosity, **while** in some family [np3,2-] [sn9,s-] the number of this kind of family [np6,3-] is not small, husbands can't stand the feminists' excessive demand. (CLEC) (ADVERSATIVE)
- 76. The old saying says that men are fond of good looks in women, **while** women adore talents. (CLEC) (ADVERSATIVE)
- 77. I [vp6,-] happen to [vp6,-] found your wallet on a bench near a lake in Zhongshan Park while I was going out for a walk. (CLEC) (TEMPORAL)
- 78. Students in ZU have more chances to train themselves by taking part in different contents [wd3,14-], mini-stock- exchange and Mileseven advertisement group, while those in GIFL concentrate on study and are used to occupying themselves with reading. (CLEC) (ADVERSATIVE)
- 79. Christmas day is being celebrated [vp6,4-3] on December 25th, **while** the Spring Festival is being celebrated [vp6,5-] on December, [sn9,-] 31st of [wd4,2-2] lunar calendar. (CLEC) (ADVERSATIVE)
- 80. If the economy is on the stump, less [aj3, 1-] graduates are needed, **while** the economy is gradually recovered, students have less [aj3, 1-] problems finds [sn8,s] work. (CLEC) (ADVERSATIVE)
- 81. She was so excited that she kept talking while she was cleaning the fish. (CLEC) (TEMPORAL)
- 82. In 1960, the life expectancy of Developing [fm3,1-1] countries is 40 years old, **while** in 1990 it is 60 years old, it has increased 20 years old. (CLEC) (ADVERSATIVE)
- 83. They just past [wd2,2-2] their greetings while meeting with you. (CLEC) (TEMPORAL)
- 84. Some people think Government should maintain the strict prison system to get rid of crime, <u>while</u> others say the prison system is outdated, [sn9,s-] no civilied [fm1,-] society punish [vp3,2-] its criminal [np6,s-] it should rehabilitate. [vp1,2-] (CLEC) (ADVERSATIVE)
- 85. It is common to see husband [np6,-s-] enjoy [vp3,2-] reading [wd4,-2] evening newspaper while his

- wife is washing dishes. (CLEC) (TEMPORAL)
- 86. Therefore, the former is for the man's comfort and willing, **while** the latter is a seriously horrible thing to a man. (CLEC) (ADVERSATIVE)
- 87. Nature is moaning <u>while</u> people are stepping up to their intended abundance. (CLEC) (TEMPORAL)
- 88. In this debate, those who are against it argue that anyone who voluntarily, knowingly or premediatedly [fm1,-] takes the life of another is a killer, **while** those who are for it retort that people have the right to die. (CLEC) (ADVERSATIVE)
- 89. However it doesn't mean that we should adhere to these principles under any circumstances while ignoring the consequences. (CLEC) (TEMPORAL)
- 90. Yet the relationship between humanity and nature seems to be more intense **while** the society develops. (CLEC) (TEMPORAL)
- 91. Young people will gather [wd4, s] and go to a high place to celebrate the night, while others will remain home. (CLEC) (ADVERSATIVE)
- 92. Maybe it is for this reason that a western food restaurant is a constant special favorate [fm1,-] among young people (especially lovers) **while** a Chinese food restaurant is usually visited by the common mass in most occasions. (CLEC) (ADVERSATIVE)
- 93. Some people support euthanasia, saying it is a merciful release to dying people while some people consider it as an inhumane behavior and the people who apply to euthanasia should be punished by law. (CLEC) (ADVERSATIVE)
- 94. Otherwise, those who contribute a lot will feel unfair and lose their initiative **while** those who do little will remain lazy and content. (CLEC) (ADVERSATIVE)
- 95. A diligent person with moderate abilitities [fm1,-] may makes [vp9,1-] some progress while a lazy person with talent will almost learn nothing. (CLEC) (ADVERSATIVE)
- 96. We ate the fruit and the moon cake while we watched the moon. (CLEC) (TEMPORAL)
- 97. For example, some people are interested in stamp collecting, [wd4,-] some people are interested in fishing, while others are interested in spots. (CLEC) (ADVERSATIVE)
- 98. Now at last the Emperor wished [wd3,1-3] to go himself and see the cloth while it was still on the looms. (CLEC) (TEMPORAL)
- 99. But for themselves, their ingeniaty [fm1,-] pehapers [fm1,-] don't extert [fm1,-], while for the second kinds [np3,1-] of people, they usually take on the danger of finding their job. (CLEC) (ADVERSATIVE)
- 100. I looked at him while he was to working [vp4,s-] in [vp1,s-] my bike. (CLEC) (TEMPORAL)

### References

- Aarts, B. (1989). Verb-preposition constructions and small clauses in English. *Journal of Linguistics*, 25(2), 277-90
- Aarts, B. (2004). Modelling linguistic gradience. Studies in Language, 28(1), 1-49.
- Abbott, B. (1972). The conjunction but. University of California, Berkeley, Ms.
- Austin, J. L. (1975). *How To Do Things with Words*. Cambridge, MA: Harvard University Press
- Altenberg, B., & Tapper, M. (1998). The use of adverbial connectors in advanced Swedish learners' written English. *Learner English on Computer*, 80-93.
- Baker, M. (2004). A corpus-based view of similarity and difference in translation. International Journal of Corpus Linguistics, 9(2), 167-193.
- Biber, D. (2004). Lexical bundles in academic speech and writing. In B.

  Lewandowska-Tomaszczyk (Ed.), *Practical Applications in Language and Computers* (pp. 165-178). Frankfurt: Peter Lang.
- Biber, D. (2010). Longman Student Grammar of Spoken and Written English. India: Pearson Education.
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure* and *use*. Cambridge: Cambridge University Press.
- Biber, D., S. Johansson, G. Leech, S. Conrad, E. Finegan. (1999). *Longman Grammar of Spoken and Written English*. London: Longman.
- Chafe, W. (1986). Evidentiality in English conversation and academic writing. In W. Chafe & J. Nichols (Eds), *Evidentiality: The linguistic coding of epistemology*

- (pp. 261-272). Norwood, NJ: Ablex.
- Cheng, W. (2008). Concgramming: A corpus-driven approach to learning the phraseology of discipline-specific texts. *CORELL: Computer Resources for Language Learning*, (1), 22-35.
- Cheng, W., Greaves, C., & Warren, M. (2006). From n-gram to skipgram to concgram. *International Journal* of *Corpus Linguistics*, 11(4), 411-433.
- Chomsky N. (1957). Syntactic Structures. Cambridge: MIT Press.
- Connor, U. (1996). *Contrastive rhetoric: Cross-Cultural aspects of second-language writing*. Cambridge: Cambridge University Press.
- Cook, W. A. (1989). *Case Grammar Theory*. Washington: Georgetown University Press.
- Danes, F. (1974). Functional sentence perspective and the organization of the text. In F. Danes (Ed.), *Papers on functional sentence perspective* (pp. 106-28). Hague: Mouton
- Field, Y. & Yip, L. (1992). A comparison of internal conjunctive cohesion in the English essay writing of Cantonese speakers and native speakers of English. *RELC Journal*, 23(1), 15-28.
- Fraser, B. (1998). Contrastive discourse markers in English. In A. Jucker, Andreas H. &Y. Ziv (Eds.), *Discourse markers: Descriptions and theory* (pp. 301–326). Amsterdam: John Benjamins.
- Fries, P. H. (1981). On the status of theme in English: Arguments from discourse. Forum Linguisticum 6(1), 1-38.
- Granger, S. (2002). A bird's-eye view of learner corpus research. In S. Granger, J. Hung, & S. Petch-Tyson (Eds.), *Computer learner corpora, second language*

- acquisition and foreign language teaching (pp. 3–33). Amsterdam: Benjamins.
- Granger, S., & Tyson, S. (1996). Connector usage in the English essay writing of native and non-native EFL speakers of English. *World Englishes*, *15*(1), 17-27.
- Greaves, C. (2005). Introduction to ConcGram©. In *Tuscan Word Centre* International *Workshop. Certosa di Pontignano, Tuscany, Italy* (pp. 25-29).
- Greaves, C., & Warren, M. (2007). Concgramming: A computer driven approach to learning the phraseology of English. *RECALL-HULL-THEN CAMBRIDGE*, 19(3), 287.
- Gilquin, G. (2000/2001). The integrated contrastive model. Spicing up your data.

  Languages in Contrast, 3 (1), 95–123
- Gui, S., & Yang, H. (2003). Zhongguo Xuexizhe Yingyu Yuliaohu.(Chinese Learner English Corpus). *Shanghai: Shanghai Waiyu Jiaoyu Chubanshe*.
- Halliday, M.A.K. (1977). Ideas about language. In M.A.K. Halliday (Ed.). *Aims and Perspectives in Linguistics* (pp. 32-49). Brisbane: Applied Linguistics Association of Australia (Occasional Papers 1).
- Halliday, M.A.K. (1979). Modes of meaning and modes of expression: Types of grammatical structure, and their determination by different semantic functions.
  In D.J. Allerton, E. Carney & D. Holdcroft (Eds.) Function and context in linguistic analysis: Essays offered to William Haas (pp.57-79). London: Cambridge University Press.
- Halliday, M.A.K. (1985). *Introduction to Functional Grammar*. London: Edward Arnold.
- Halliday, M.A.K. (1992). Language as System and Language as Instance: the Corpus as a Theoretical Construct'. In J. Svartvik (Ed.), *Directions in corpus linguistics:*Proceedings of Nobel Symposium 82 Stockholm, 4-8 August 1991. (TLSM65).

- (pp.61-77). Berlin/ New York: Mouton de Gruyter.
- Halliday, M.A.K. (1993). Towards a language-based theory of learning. *Linguistics* and Education, 5(2), 93-116.
- Halliday, M. A. K. (1994). *An Introduction to Functional Grammar*. 2nd edn. London: Arnold.
- Halliday, M. A. K., & Hasan, R. (1976). Cohesion in English. London: Longman.
- Halliday, M.A.K., & Martin, J.R. (1993). Writing science: Literacy and discursive power. Pittsburgh: University of Pittsburgh Press.
- Halliday, M.A.K., & Matthiessen C. (1999). *Construing experience through meaning: A language-based approach to cognition*. London, New York: Cassell.
- Halliday, M.A.K., & Matthiessen C. (2004). *An Introduction to Functional Grammar*. 3rd, revised edition. London: Edward Arnold.
- Harris, M. (1988). Concessive clauses in English and Romance. In J. Haiman & S. A. Thompson (Eds.), *Clause combining in grammar and discourse* (pp. 71-79). Amsterdam: Benjamins.
- Huddleston, R. (1988). *English grammar: An outline*. Cambridge: Cambridge University Press.
- Huddleston, R., & Pullum, G. K. (2002). *The Cambridge Grammar of English* Cambridge: Cambridge University Press.
- Intaraprawat, P., & Steffensen, M. S. (1995). The use of metadiscourse in good and poor ESL essays. *Journal of Second Language Writing*, 4(3), 253-272.
- Kennedy, G. (1998). *An Introduction to Corpus Linguistics*. London: Addison Wesley Longman.

- König, E. (1985). On the history of concessive connectives in English: Diachronic and synchronic evidence. *Lingua*, 66(1), 1-19.
- Kortmann, B. (1991) Free Adjuncts and Absolutes in English. London: Routledge.
- Lakoff, R. (1971). If's, and's and but's about conjunction. *Studies in Linguistic Semantics*, (3), 114-149.
- Leech, G. N. (2004). *Meaning and the English verb*. Harlow: Pearson Longman.
- Longacre, R. E. (2007). Sentences as combinations of clauses. In T. Shopen (Ed.), Language *typology and syntactic description*, *vol.* 2: *complex constructions* (pp. 372-420). Cambridge: Cambridge University Press.
- Mann, W.C., & Matthiessen C. (1991) Functions of language in two frameworks. *Word 42* (3): 231-249.
- Mann, W. C., & Thompson, S. A. (1987). Rhetorical structure theory: A theory of text organization. In L. Polanyi (Ed.), *The Structure of Discourse*. Norwood, NJ: Ablex Publishing Corporation. Also available as USC/Information Sciences Institute RS-87-190.
- Mann, W. C., & Thompson, S. A. (1988). Rhetorical structure theory: Toward a functional theory of text organization. *Text*, 8(3), 243-281.
- Mann, W. C., Matthiessen, C., & Thompson, S. A. (1992). Rhetorical structure theory and text analysis. In W. C. Mann & S. A. Thompson (Eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text* (pp. 39-78). Amsterdam: Benjamins.
- Martin, J. R. (1992). *English text: System and structure*. Amsterdam: John Benjamins Publishing.
- Martin, J. R., Matthiessen, C., & Painter, C. (2010). Deploying Functional Grammar.

- Beijing: The Commercial Press.
- Matthiessen, C. (1992). Interpreting the textual metafunction. In M. Davies & L. Ravelli (Eds.), *Advances in systemic linguistics: Recent theory and practice* (pp. 37-81). London: Pinter.
- Matthiessen, C. (1995). Theme as an enabling resource in ideational 'knowledge' construction. In M. Ghadessy (Ed.), *Thematic development of English texts* (pp. 20-55). London: Continuum.
- Matthiessen, C. (2002). Combining clauses into clause complexes: A multi-faceted view. In J. Bybee & M. Noonan (Eds.), *Complex sentences in grammar and discourse: Essays in honor of Sandra A. Thompson* (pp. 237-322). Amsterdam: Benjamins.
- Matthiessen, C. (2006). Frequency profiles of some basic grammatical systems: An interim report. In S. Hunston & G. Thompson (Eds.), *System and corpus: Exploring connections* (pp. 103-142). London: Equinox.
- Matthiessen, C. (2013). Register in the round: Registerial cartography. In L. Barbara & S. Cabral (Eds.), *Teoria Sistânico-Funcional para brasileiros (Systemic Functional Theory for Brazilians*). PPGL: Programa de P´os-Graduação em Letras. UFSM: Santa Maria, Brazil: Universidade Federal de Santa Maria.
- Matthiessen, C., & Thompson, S. A. (1988). The structure of discourse and 'subordination'. In J. Haiman & S. A. Thompson (Eds.), *Clause combining in grammar and discourse* (pp. 275-329). Amsterdam: Benjamins.
- Milton, J. C. P., & Tsang, E. S. (1993). A corpus-based study of logical connectors in EFL students' writing: Directions for future research. In R. Pemberton & E. Tsang (Eds.), *Studies in Lexis* (pp. 215–246). Hong Kong: The Hong Kong University of Science and Technology.

- Nesi, H., & Thomson, P. (2007). *British Academic Written English Corpus*. Available at <a href="http://www2.warwick.ac.uk/fac/soc/celte/research/bawe/">http://www2.warwick.ac.uk/fac/soc/celte/research/bawe/</a>
- Pollard, C., & I. A. Sag (1994). *Head-driven Phrase Structure Grammar*. Chicago: University of Chicago Press.
- Quirk, R., (1954). *The Concessive Relation in Old English Poetry*. New Haven: Yale University Press
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A Comprehensive Grammar of the English Language*. London/New York: Longman.
- Ramat G., Anna, & Mauri. C. (2008). From cause to contrast: A study in semantic change. In E. Verhoeven, S. Skopeteas, Y.M. Shin, Y. Nishina, & J. Helmbrecht (Eds.), Studies on grammaticalization (pp. 303–321). Berlin & New York: Mouton de Gruyter.
- Ringbom, H. (1998). Vocabulary frequencies in advanced learner English: A cross-linguistic approach. In S. Granger (Ed.), *Learner English on computer* (pp. 41-52). London/New York: Longman.
- Rudolph, E. (1996). Contrast: Adversative and concessive relations and their expressions in English, German, Spanish, Portuguese on sentence and text level Berlin: Walter de Gruyter.
- Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language*. Cambridge: Cambridge University Press.
- Searle, J. R. (1976). A classification of illocutionary acts. *Language in society*, 5(01), 1-23.
- Scott, M. (2008). WordSmith Tools version 5, Liverpool: Lexical Analysis Software.
- Silva, T. J., & Matsuda, P. K. (Eds.). (2001). Landmark essays on ESL writing (Vol.

- 17). Mahwah, NJ: Lawrence Erlbaum Assoc Incorporated.
- Sinclair, J. (2003). *Reading concordances: An introduction*. London/New York: Pearson/Longman.
- Taboaba, M. (2006). Discourse markers as signals (or not) of rhetorical relations. *Journal of Pragmatics*, 38(4), 567–592.
- Thompson, S. A., & Mulac. A. (1991a). A quantitative perspective on the grammaticization of epistemic parentheticals in English. In E. Traugott & B. Heine (Eds.), *Grammaticalization II* (pp. 313-339). Amsterdam: John Benjamins.
- Thompson, S. A., & Mulac, A. (1991b). The discourse conditions for the use of the complementizer *that* in conversational English. *Journal of Pragmatics*, 15(3), 237-251.
- Thompson, S. A., Longacre, R. E., & Hwang, S. J. J. (2007). Adverbial clauses. In T. Shopen (Ed.), *Language typology and syntactic description* (pp. 237-300). Cambridge: Cambridge University Press.
- Traugott, E. C. (1997). Subjectification and the development of epistemic meaning: The case of promise and threaten. In T. Swan & O. J. Westvik (Eds.), *Modality in Germanic languages: Historical and comparative perspectives* (Vol. 99) (pp. 185-210). Berlin: Walter de Gruyter.
- Walter, E. (Ed.). (2008). *Cambridge Advanced Learner's Dictionary*. Cambridge: Cambridge University Press.
- Witte, S. P., & Faigley, L. (1981). Coherence, cohesion, and writing quality. *College Composition and Communication*, 32(2), 189-204.