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Examining Argumentative Coherence in Essays by Undergraduate Students of English as a Foreign Language in Mainland China and Their English Speaking Peers in the United States

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EXAMINING ARGUMENTATIVE COHERENCE IN ESSAYS BY

UNDERGRADUATE STUDENTS OF ENGLISH AS A FOREIGN LANGUAGE IN

MAINLAND CHINA AND THEIR ENGLISH SPEAKING PEERS IN THE UNITED

STATES

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To: Dean Delia C. Garcia
     College of Education

This dissertation, written by Lianhong Gao, and entitled Examining Argumentative Coherence in Essays by Undergraduate Students of English as a Foreign Language in Mainland China and Their English Speaking Peers in the United States, having been approved in respect to style and intellectual content, is referred to you for judgment. We have read this dissertation and recommend that it be approved.

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Teresa Lucas

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Benjamin Baez

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Kyle Perkins

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Eric Dwyer, Major Professor

Date of Defense: February 16, 2012

The dissertation of Lianhong Gao is approved.

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Dean Delia C. Garcia
College of Education

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Dean Lakshmi N. Reddi
University Graduate School

Florida International University, 2012

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At this moment of finishing a dissertation project, I feel really content with what I have accomplished. I remember all my goals illustrated in my personal statement in the application package. I planned to learn knowledge about how to conduct research; I wanted to know more about bilingual education, especially how to teach bilingual courses in Chinese higher education; I expected to know the complexity of educational administration and how to conduct studies of educational policies; I wanted to know the updated teaching methods of college English, assessment of language learning, what coherence was and why teaching vocabulary was so important; I also wanted to know how to develop EFL curricula and syllabi. Now, I have got what I wanted about educational research, administration, and language learning and teaching principles, or even more than I expected. Having achieved these goals, I hold, deep in my heart, the gratitude for the help that I have been given by the people around me.

The major professor, Dr. Eric Dwyer, has been providing sufficient support for my dissertation project, being so patient and encouraging, reviewing the drafts again and again, linking my conceptual frameworks with paragraphs, sentences, phrases and graphics. During this process, the contrasting rhetorical preferences have been made so obvious that I like to present my ideas in sequential conceptualized frameworks while he linked these less coherent frameworks into a smooth flow of meaning. Dr. Benjamin Baez and his suggestion about the macro-structure of the dissertation refined the beginning chapter, especially his reminder to give equal attention to both Chinese and U.S. students' English writing since this was a comparative study. As a result, the research purpose of the study was elevated from focus on Chinese college students'

English writing to college English intercultural rhetoric. Dr. Kyle Perkins reminded me of the importance to have hypotheses specified in the study since a dissertation is expected to include three types of knowledge: theoretical, procedural and empirical. Statements of hypotheses are part of procedure knowledge and it's necessary to have them included in the statistical testing procedures. He also guided me into the assessment horizon of writing, from which I got to know direct writing assessment, holistic writing assessment and analytical writing assessment. The last category, analytic assessment, is what my study was related to. From him, I also got to know that analytic assessment is good for giving feedback. Dr. Teresa Lucas's question about the relationship between concepts and theories informed me of the importance of illustrating how theories were formulated and their relationship with concepts. When I found the answer from the book about the foundations of grounded theory, I realized how essential the knowledge was for a doctoral student. Her reminding of mentioning how to do self-revision in the section of implications was also helpful to refine the composing of the dissertation.

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I am also thankful for my husband. He has set a good academic example for me and his encouragement and care in the past decade have been the most valuable in my life.

Some weblog writer said that our parents had asked us to be persistent in our work, but were we persistent in our love? The writer felt so regretful that we sometimes failed to do so. This persistent love for and from my husband has been derived not from the flowers and other gifts exchanging but the affectionate bonds nurtured in the common life shared by both of us. The last but not the least important, I am also thankful for my little daughter, who, with her intelligence, hard work and thoughtfulness, inspired me to be persistent and carry through this substantial dissertation project.

Finally, I would like to deliver my acknowledgement to the participants in this study who actually inspired a revised section of my teaching philosophy: students are not empty containers for teachers to fill in with knowledge, but full containers of prospect knowledge awaiting teachers to activate them. Once activated, knowledge will be overflowing from the students' minds, which must be such an exciting experience that has been attracting more and more people to the profession.

ABSTRACT OF THE DISSERTATION

EXAMINING ARGUMENTATIVE COHERENCE IN ESSAYS BY

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Miami, Florida

Professor Eric Dwyer, Major Professor

I conducted this study to provide insights toward deepening understanding of association between culture and writing by building, assessing, and refining a conceptual model of second language writing. To do this, I examined culture and coherence as well as the relationship between them through a mixed methods research design. Coherence has been an important and complex concept in ESL/EFL writing. I intended to study the concept of coherence in the research context of contrastive rhetoric, comparing the coherence quality in argumentative essays written by undergraduates in Mainland China and their U.S. peers. In order to analyze the complex concept of coherence, I synthesized five linguistic theories of coherence: Halliday and Hasan's cohesion theory, Carroll's theory of coherence, Enkvist's theory of coherence, Topical Structure Analysis, and Toulmin's Model. Based upon the synthesis, 16 variables were generated. Across these 16 variables, Hotelling t-test statistical analysis was conducted to predict differences in argumentative coherence between essays written by two groups of participants. In order

to complement the statistical analysis, I conducted 30 interviews of the writers in the studies. Participants' responses were analyzed with open and axial coding. By analyzing the empirical data, I refined the conceptual model by adding more categories and establishing associations among them.

The study found that U.S. students made use of more pronominal reference. Chinese students adopted more lexical devices of reiteration and extended paralleling progression. The interview data implied that the difference may be associated with the difference in linguistic features and rhetorical conventions in Chinese and English. As far as Toulmin's Model is concerned, Chinese students scored higher on data than their U.S. peers. According to the interview data, this may be due to the fact that Toulmin's Model, modified as three elements of arguments, have been widely and long taught in Chinese writing instruction while U.S. interview participants said that they were not taught to write essays according to Toulmin's Model. Implications were generated from the process of textual data analysis and the formulation of structural model defining coherence. These implications were aimed at informing writing instruction, assessment, peer-review, and self-revision.

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Chapter I

Introduction

Writing has been an indispensable part of English tests for college students in China. In the official rubric stipulated by the national college English teaching committee responsible for supervising the tests, the first criterion listed for rating a student's writing was whether the text was "*coherent*" (Li & Gao, 2003; See Appendix A for the rubric). What coherence is and how I may make a text coherent have been my concerns for years. The construct of coherence had been so elusive for a language student like me that the uncertainty about the coherent quality of the writing drove my inquiry about it. Since taking up college English teaching as my profession, I have been even keener to understand coherence in writing and accordingly to know how to rate students' English writing based on their ability to manifest coherence in their writing.

Indeed, coherence has been regarded as an important quality of effective writing (Bamburg 1984; Richards, 1990) and also a complex and indefinite concept that is difficult for researchers and teachers to study and teach (Connor, 1990; Lee, 2002; Roberts & Kreuz, 1993). Several attempts to study coherence in narratives of students of English as a second language (ESL) or English as a foreign language (EFL), including expository and argumentative writing (e.g., Lee, I., 2002; Lee, M. Y. P., 2003; Liu & Braine, 2005),[1] have contributed theoretical explanations of the concept and empirical tools for examining coherence; however, the pedagogical implications for informing

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[1] Other related studies include Achili, 2007; Chen, 2008; Connor, 1984; Crewe, 1990; and Zhang, 2000.

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English educators as to how to teach students to enhance the quality of coherence in their writing has still been insufficient. In fact, coherence as a construct has seemingly been taken for granted by native English speakers (Lee, 2002), although it is a complex and indefinite concept that is difficult for ESL/EFL students to study and ESL/EFL educators to teach (Cerniglia, Medsker, & Connor, 1990; Gao, 2003; Lee, 2002).

Such concerns triggered this research study examining coherence by means of a multiple dimensional approach according to theories of coherence in psycholinguistics and text linguistics. This study was conducted to produce an in-depth and comprehensive understanding of argumentative coherence in college students' English compositions in both Mainland China and the United States for the purpose of providing pedagogical implications as well as implications for students to do self-revision of their own compositions. In this study, U.S. college students' compositions were regarded as the reference group so that Mainland Chinese students' English compositions could be analyzed and compared with those written by the reference group (See Appendix B for composition examples of Chinese college students). Such a research orientation naturally includes a context of contrastive and intercultural rhetoric—contrastive rhetoric aiming at finding out similarities and differences between texts in different cultures and languages, and intercultural rhetoric stressing the importance of cultural and rhetorical factors associated with the findings of contrastive analysis.

The Research Context

As indicated above, I approached this study from contrastive and intercultural rhetorical perspectives. Connor (2004) explained contrastive rhetoric as the examination of similarities and differences in writing across cultures. Such a research direction was initiated by studies in second language writing, which identified problems encountered by ESL students in their compositions. Differences were found in rhetorical conventions across cultures, differences identified as causes that made ESL/EFL students' writing look different from the native perspective. It was assumed that there were different rhetorical patterns in different languages and cultures, and those patterns were transferable to second or foreign language learning. Thus, in this study I hypothesized that coherence patterns in Chinese undergraduate students' English argumentative essays might be different from those manifested in their U.S. peers' essays.

Intercultural rhetoric was derived from contrastive rhetoric, broadening the contrastive rhetorical study into different genres (Connor, 2004). The concept of culture was also re-conceptualized into sub-categories, making it possible to inspect the specific association between culture and writing. Connor suggested that dynamic interaction within and between cultures on the interface of cross-cultural writing should be inquired about in order to explain the production and comprehension of texts. Based on the above theoretical statements, I generated another hypothesis that the variations in coherence of Chinese and American students' compositions might be associated not only with the rhetorical conventions but also with such cultural categories as personal culture, academic and professional culture, and classroom culture.

A Model of Coherence for Argumentation

Coherence, the construct examined in this study, is a complex concept. To explain such a concept, I constructed a model of argumentative coherence by synthesizing five linguistic theories: Halliday and Hasan's (1976) cohesion theory, Carroll's (1999/2007) theory of coherence, Enkvist's (1990) theory of coherence, Topical Structure Analysis (Lautamatti, 1978) and Toulmin's Model (Toulmin, 1956/2003). In text linguistics, coherence is conceptualized as being composed of three facets: cohesion (lexical and grammatical links), plausibility or interpretability (semantic association between the old and the new information), and justifiability (logic) (Enkvist, 1990).

The facet of cohesion in Enkvist's theory was derived from Halliday and Hasan's theory of cohesion, defined as the cohesive quality of a text resulting from lexical and grammatical links (Halliday & Hasan, 1976). Halliday and Hasan specified five major classes of cohesive devices: reference, substitution, ellipsis, conjunction, and lexical cohesion; some of these classes also had subclasses.

In Enkvist's (1990) theory, plausibility or interpretability referred to the quality of a text enabling readers to build associations between the new knowledge and the old so that text could be comprehensible. This facet focused upon the semantic relationships between topics in sequential sentences of a text. In this sense, topical structure analysis is a good fit to inspect this facet of coherence.

Justifiability required writers' ideas to be marching out in a reasonable order. Toulmin (1956, 2003) approached a critical problem: whether there was one universal system of norms by which all sorts of arguments in all sorts of fields could be judged. His

model of *claim, data, and warrant* took into account both certain constants and variables to create a more empirical, data-based logic. Synthesizing theories of cohesion, topical structure analysis, and Toulmin's Model, I built a model of argumentative coherence to examine coherence patterns in cross-cultural contexts.

A Conceptual Model

Integrating the conceptualization of coherence with the theoretical framework of contrastive and intercultural rhetoric, we can formulate a conceptual model to showcase the interplay between the construct of coherence and contrastive as well as intercultural rhetorical elements. The new structural model can be illustrated as follows:
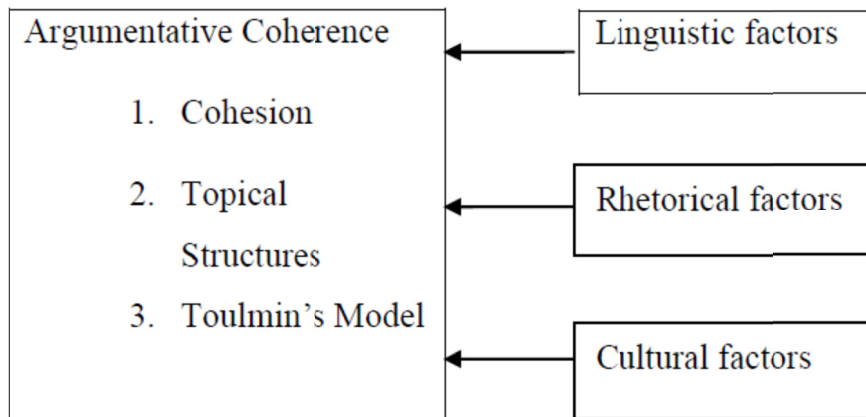
Figure 1. A conceptual model of intercultural writing.

The variations in coherence in compositions of students from Mainland China and the U.S. may be due to not only the rhetorical differences illustrated by Robert Kaplan (1968) or John Hinds (1990) but also the instructional differences in writing classrooms of both cultures. Studies of coherence should also be genre-related. Each genre has its own scheme to guide readers. There are variations to the scheme of the same genre in different language and cultural contexts (Lee, 2003)**.** After findings of this study were obtained from data analysis, I assessed and refined this model.

Purposes of This Study

This study compared argumentative coherence in essays written by college students from Mainland China and the United States with the contrastive and intercultural rhetorical approach. Similarities and differences were determined with contrastive rhetorical analysis. Meanwhile, an intercultural rhetorical approach was applied to uncover cultural and rhetorical factors associated with the similarities and differences. The purpose of such an inquiry was two-fold: one was to define the concept of coherence and formulate the theory of coherence in argumentative texts, enabling the theoretical analysis of argumentative coherence in multiple levels; the other was concerned with providing implications for English writing instructions.

Theories of coherence have been mainly descriptive and less prescriptive, meaning the definition of the concept has been quite elusive and not so clearly theorized as to be instructive for educators to apply in classroom writing instruction. However, in order to make writing coherent to readers, the schematic framework is necessary for

readers to comprehend the writing. Such a schematic framework was expected to be one of the fruits of this study, as presented in Chapter III as a structural model to define argumentative coherence. The effectiveness of the model was also tested with textual and interview data through the study as applicable to analyze essays and review them.

Pedagogical implications concerning how to teach coherence in argumentative essays were generated during the process of defining the concept of coherence and textual data analysis. The structural model of coherence manifested different facets of the construct of coherence and enabled the analysis of the construct to be instructive to student essay writing. The process of data analysis shed light upon how to conduct text analysis with reference to cohesion theory, topical structure analysis, and Toulmin's Model. This type of procedure knowledge is helpful to inform teachers and students of how to analyze writing in terms of coherence.

Providing implications for students' strategy of self-revision was another research purpose. Self-revision has been an important strategy in writing especially for academic writing since academic writers are quite mature in terms of knowledge and experiences. Proper lenses for the writers to revise their texts are the key for self-revision. With the right lenses, writers may find fault with their own writing but revise in an effective way. Topical structure analysis and Toulmin's model have been recognized as effective strategies for teaching academic writing (Hegelund & Kock, 2003, Oi & Kamimura, 1997) and self-revision (Connor & Farmer, 1990). This dissertation study suggested applying these two strategies in self-revision of college English compositions and academic papers for both first language (L1) and second language (L2) writers.

Significance of the Study

The association between culture and writing has been an important issue examined in literacy studies in recent years. This social approach to writing, one of the major literacy practices, illuminates the mechanism of the interaction between the writer and the reader on the interface of text in a certain social and historic discourse. Although consensus exists that language learning is of importance for communicative quality improvement and cultural understanding promotion, and China has the largest population of English language learners, there is insufficient literature that has addressed the issue of EFL in Mainland China. This study aims to help fill in this gap.

Theory: The Model of Coherence

Coherence in writing has been examined holistically. Holistic evaluation of writing is synonymous with subjective judgment. Subjective judgment involves an individual's previous knowledge and intuition. This chain of effects can convince us that coherence is the effect of a textual rhetoric on readers that is thus subjective and beyond description or illustration. Intangible as coherence is, composition researchers still need to operationalize this concept in order to (a) generate more knowledge in the process of dealing with the concept or (b) illustrate it in writing instruction so that students can see coherent frameworks rather than a nebulous, abstract concept. As a matter of fact, materialization of nebulous concepts is one of the steps in the evolution of theories. The cycle of the evolution can be described as follows: inductive thinking theorizes commonalities, resulting in abstract theories, and then we deductively give shape to the

theories in order to make them tangible, applicable, or feasible in reality or practice, which may develop theories to a higher level.

Gardner's (1983) multiple intelligences remind us of the multiple dimensions of learning and literacy. They also remind writing researchers to observe writing from multiple dimensions or conduct hermeneutic evaluation of writing. Writing is considered to be a linguistic product as well as a cultural product, and it reflects a process of thinking. In this study, writing is perceived as cohesion of lexical and grammatical devices in the dimension of form. Concerning the dimension of meaning, it is also regarded as a cluster of semantic associations between old and new information by attaching comments to their respective topics. In the dimension of logic, writing is also a logical product that enables the reader to identify rhetorical features or thinking patterns in different genres. In one sentence, writing is a cultural and linguistic product which is interpretable and justifiable to the reader.

The model of coherence for argumentations is the fruit of such a multiple dimensioned perception. Though theorizing coherence in a general sense is impossible, constructing a model in a specific context may be feasible. Here, I refer to two theories of coherence: one refers to the rhetorical features of a text, the other to the perceptions of the readers concerning the writing quality of a text (Schneider & Connor, 1991). In this model, both are applied. For the cohesive and topical structural parts of the model, the first theory is applied. Toulmin's notions of claim, data, and warrant are based upon the second theory of coherence. Such a model observes coherence in an argument from three dimensions, an attempt to account for holistic evaluation of coherence since holism means multiple dimensions, interpreted as a whole.

Practice: College English Composition Instruction and Assessment

Methods are not just ways of doing things, but they are also ways of generating knowledge (Cintron, 1993; Williams & Colomb, 1993). With such a model of coherence to guide students in their writing, students should then be able to discover more meaning from these three dimensions. Form in students' compositions will be diversified and the contents will be enriched. As for writing assessment, for a long time, we have resorted to human beings' unique taste of good writing. Writing raters have claimed, "After I see it, I will tell if it is good writing."

I offer here a personal anecdote: Once I was asked to rate writing in Band 4 College English tests.[2] Inter-rater technique was applied to training and supervising the raters. My colleague and I had very high correlation, close to 1.00, but the authority didn't recognize us as the most reliable raters. Thus, a lesson from such an experience leaves me to summarize that subjectivity in rating writing is so uncontrollable that students can only pray for good luck. Some may suggest a framework to analyze the compositions with different lenses so that how to assess students' compositions is made transparent to some extent.

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[2]Band 4 College English Test is an English proficiency test for college students in China.

Research Questions

Native English speakers might take for granted the construct of coherence in their English writing, but Chinese EFL students, taught to use Chinese schematic knowledge in their Chinese writing, would probably feel uncertain about how coherence was manifested in their English writing, unavoidably transferring Chinese schematic knowledge to writing English essays. In this study, I expected to determine different coherent features shown in Chinese EFL and U.S. English speakers' argumentative essays. I also wished to explore cultural, rhetorical, and linguistic factors related to the differences, disregarding language proficiency.

This dissertation proposed that coherence in Chinese undergraduate students' English essays might be associated with Chinese rhetorical conventions. The point of departure in this dissertation—the degree to which there were differences between the coherence patterns in the English essays written by Chinese and U.S. undergraduates—resulted from this proposition, yielding the following questions:

1. Is coherence in Mainland Chinese EFL students' argumentative compositions different from that of English speaking U.S. students' compositions with reference to the model of argumentative coherence? If so, how? To this end, I asked the following questions:

    a. What differences can be found in terms of frequencies of different cohesive devices used in the argumentative essays by the two groups of students?

b. What differences can be found pertaining to the frequencies of three types of sentential progression and T-units in the argumentative essays by the two groups of students?

c. What differences can be found with reference to the means of scores on three indices of claim, data, and warrant in the argumentative essays by the two groups of students?

2. What cultural, rhetorical, and linguistic factors can be identified to be associated with the coherence differences in Mainland Chinese EFL and U.S. English speaking college students' argumentative compositions?

3. How are the cultural, rhetorical, and linguistic factors interrelated with one another?

The association between the research questions and the conceptual model can be illustrated by Figure 2.
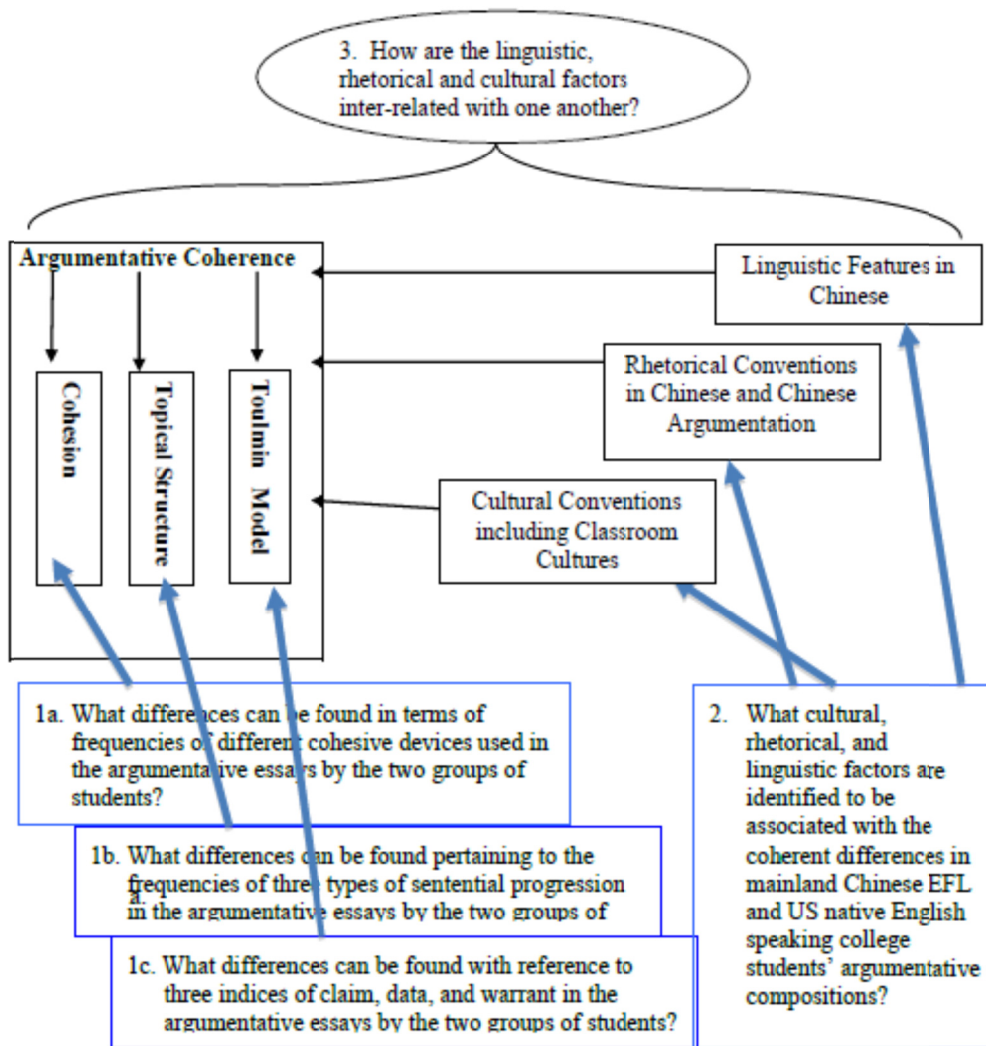
Figure 2. How the conceptual model of intercultural writing corresponds to the research questions.

In summation, the study provided a new approach to measure coherence by synthesizing related linguistic theories to generate series of variables. Through the use of a mixed-method research design, a multilevel conceptual model was formulated to illustrate the relationship between culture and writing with a mixed-method research design. In addition, the study explored employing a social theory of language and a

semiotic theory of culture to analyze the social discourse of Chinese students' EFL writing in Mainland China.

Overview of Methods

This intercultural rhetorical study was conducted by means of a mixed methods approach. Data were collected from students' compositions and interviews of the students as well as memos. Textual data were analyzed by Hotelling (multivariate) t-test statistical procedures to determine if differences of means existed in measures of coherence in argumentative essays written by Mainland Chinese EFL students and U.S. English speaking college students. The differences were examined in terms of cohesive devices, topical structures, and Toulmin's Model of claim, data, and warrant. Interview data as well as memos were analyzed with open coding and axial coding integrated with the constant comparative method. The conceptual model formulated by the theoretical analysis was assessed and modified by empirical data analyzed both qualitatively and quantitatively, combined with a related research literature review to explore cultural, rhetorical and linguistic factors associated with the findings of this study.

Assumptions

The first assumption was, according to what the theory of contrastive rhetoric assumes, that "discourse is not simply a collection of correct syntactic structures, but rather represents a complex multifaceted, multidimensional set" (Kaplan, 2001, p. ix.)

Aligned with this general assumption of contrastive rhetoric, I specifically assumed that writing is not just a linguistic product, but also a cultural product as well as a cognitive process. As Enkvist (1997) put it: "To modern text and discourse linguists this is so obvious that it seems curious that grammarians and teachers of composition have, through the centuries, spent so much time and effort on syntactic phenomena within individual sentences, while overlooking the fundamental questions of text strategy and information flow" (p. 199).

Delimitations

Whether I was able to find significant differences between Chinese and U.S. undergraduates' compositions or not, I might be interested in what factors ***caused*** these differences. However, I couldn't pursue such a research question in this particular study since the design was solely a comparative study. Based upon such, this study could only refer to inquiry into factors ***associated with*** cross-cultural composition. Another consideration is given to the English language proficiency of the Chinese participants in the study. Students with lower levels of English language competency were not included in the study. Specifically, Chinese college students who have passed English entrance exams for colleges and universities were included in the study. Finally, this study concentrated upon the aspects of coherence defined by cohesion theory, topical structure analysis, and Toulmin's Model, manifested by college students' argumentative essays.

Definition of Terms

In order to foster more definitive comprehension of this research study, I employed the following definitions:

Argumentative compositions are compositions written to justify one claim or multiple claims.

Chinese college students refer to students currently studying in Mainland Chinese universities.

Coherence refers to sentence-level connectedness, paragraph unity, and discourse unity.

Cohesion refers to the quality of utilizing lexical and grammatical devices to textualize utterance or writing.

Contrastive rhetoric studies similarities and differences in cross-cultural writing.

ESL refers to English learned as a second language. In other words, language learners learn English in a community where English is the first language.

EFL refers to English learned as a foreign language. In contrast with to ESL, EFL learners learn English in a community where English is not the first language.

Intercultural rhetoric is derived from contrastive rhetoric, but it puts more research emphasis on the impacts of L1 rhetorical conventions on L2 writing.

Interlanguage is an emerging linguistic system that has been developed by a learner of a second language who has not become fully proficient, but is approximating the target language, preserving some features of his or her first language, or

overgeneralizing target language rules in speaking or writing the target language and creating innovations.

L1 refers to native language.

L2 refers to second language in contrast with native language.

Mainland China refers to the part of China excluding Taiwan, Hong Kong, and Macao.

Rhetoric is defined as the choice of linguistic and structural aspects of discourse—chosen to produce an effect on an audience (Purves, 1988). It is composed of three parts: to deliver, to persuade, and to entertain. It consists of three techniques: ethos (ethics), pathos (emotions), and logos (logic) (Gross & Walzer, 2000).

Schemata is the plural form of schema, which refers to an underlying mental structure which might include a model of a text for readers to use while comprehending the text.

Textuality refers to attributes that make a text a text. For example, cohesiveness and macro structures of texts.

Textualization refers to making use of devices and strategies to make a text a text.

Topical structure analysis refers to the analysis of the semantic relationships between the topics of the sequential sentences in a text.

Toulmin's Model is also called the informal logical model since it presents an inverse order of syllogism. It is composed of 6 parts: claim, data, warrant, backing, qualifier, and rebuttal.

Whorfian Hypothesis assumed that culture, through language, impacts people's thinking.

Organization of the Dissertation

Chapter I is a brief introduction of the theoretical synthesis to define the construct of coherence and the research context of contrastive and intercultural rhetoric. Research purposes, assumptions and delimitations were also included in this chapter. Chapter II is devoted to defining the construct of coherence to the extent so that the generation of specific research questions can be underpinned. The theoretical synthesis of the coherence theories is elaborated upon and a structural model of coherence is built, based upon which, research question 1 was generated. Another conceptual model was also constructed to show the association between culture and writing by reviewing theories and empirical studies. Research question 2 was generated according to this conceptual model. Chapter III is the review of the research context of this study, which is broken into 4 parts: 1) the theoretical underpinnings of contrastive and intercultural rhetoric; 2) the research studies concerning comparison of Chinese and English rhetorical conventions and the association with culture; 3) Studies of Chinese students' academic English writing in U.S. universities; 4) and studies of coherence in cross-cultural context.

Chapter IV elaborates upon the research methodology of the study. This inquiry of argumentative coherence in intercultural context was conducted with a mixed methods design. The coherence features manifested in two cultural groups' student essays were compared and analyzed by Hotelling t-test while the association between coherence features and culture was probed by qualitative interviews. Qualitative data were analyzed by open and axial coding. In Chapter V, research question 1 and its three sub-questions

are answered through Hotelling *t*-test statistical procedures. Difference in cohesive devices, topical structures, and Toulmin's Model was found by multivariate t-test.

In Chapter VI, difference was found in coherence features manifested in student essays. The linguistic, rhetorical, and cultural factors are explored and the interrelation between three factors is also elaborated upon. Along with the elaboration, the initial conceptual model built in Chapter I is assessed and refined to demonstrate the interactions between factors, constructs, and variables on multiple levels. In Chapter VII, using the social theory of language and the semiotic theory of culture, the relationship between text and culture or social discourse is explained, referring to this empirical study. Some methodological issues are also discussed concerning the debate on paradigms in a mixed methods study.

How to teach argumentative coherence is one of the issues addressed in this study. In Chapter VIII, this issue was suggested to be solved by referring to the synthesis of five linguistic theories. Inspirations I obtained during the research process from memo writing and data analysis were provided to inform writing instruction and self-revision.

Two important themes were discussed in Chapter IX: one is the disciplinary orientation of the study, the other is one prospect this study may inspire, a prospect designated as integrative multicultural education from the perspective of college English rhetoric.

Chapter II

Defining Coherence

Since this study has a complex process of generating research questions and adopts a mixed methodology involving both quantitative and qualitative methods, it takes separate chapters to elaborate upon the generation of the research questions and another chapter to elaborate upon the research context. Hence, Chapters II and III are focused upon a substantial literature review of the study, coping with explanation of related concepts, theories, and elaboration upon the research context this study was oriented in. In this chapter, the construct of coherence is illustrated in detail. Coupled with the review of studies of coherence in ESL/EFL writing, the research questions are generated based on the definition of coherence by synthesizing five linguistic theories. The research context will be illustrated in Chapter III to provide theoretical and methodological frameworks for the study. Chapter II is therefore devoted to defining the construct of coherence to the extent so that specific research questions can be obtained.

Defining Coherence

Coherence has been an indefinite concept arousing much controversy (Grabe & Kaplan, 1996). Nevertheless, there is some consensus in defining this concept in that it should be conceptualized as the quality of the text with respect to the effects of the text on the reader. Synthesizing theoretical analysis in texture and schemes of the text, Lee (2002) proposed an operational definition of coherence for ESL/EFL students to refer to

since their own L1 rhetorical conventions may be different from the English ones,

including the following features:

1. Connectivity of the surface text evidenced by the presence of cohesive devices (Halliday & Hasan, 1976).
2. An information structure which guides the reader in understanding the text and contributes to the topical development of the text (Connor & Farmer, 1990; Firbas, 1986; Lautamatti,1978).
3. Connectivity of the underlying content evidenced by relations between propositions and overall discourse (Kintsch & van Dijk, 1978).
4. A macrostructure with a characteristic pattern or shape appropriate to its communicative purpose and context of situation (Hoey, 1983, 1991).
5. Reader-based writing signaled by appropriate metadiscoursal features (Cheng & Steffensen, 1996; Crismore, Markkanen & Steffensen, 1993).

(Lee, 2002, p. 139)

The definitions above have made attempts to illustrate the concept of coherence as

discourse features, which were, however, not so specified as to be categorized. Wolf and

Gibson (2006), by synthesizing studies about coherence and analyzing natural language,

found eight kinds of coherence relations, representing coherence structures. They are

Cause – effect, Violated expectation, Condition, Similarity, Contrast, Elaboration,

Attribution, and Temporal sequence. These eight types of coherence relations, indicating

the eight types of logical relations between sentences or the discourse segments, were

conducive to understand such a discourse phenomenon, as presented in the following

table with examples:

Coherence Relations	Examples	
	Discourse segments a	**Discourse segment b**
Cause - effect	[There was bad weather at the airport]	[and so our flight got delayed.]
Violated expectation	[The weather was nice]	[but our flight got delayed.]
Condition	[If the new software works,]	[everyone will be happy.]
Similarity	[There is a train on platform A.]	[There is another train on platform B.]
Contrast	[John supported Bush]	[but Susan opposed him.]
Elaboration	[A probe to Mars was launched this week.]	[The European-built *Mars Express* is scheduled to reach Mars by late December.]
Attribution	[John said that]	[the weather would be nice tomorrow.]
Temporal sequence	[Before he went to bed,]	[John took a shower.]

Table 1. Kinds of Coherence Relations.

Enkvist (1990), a precursor to Lee, tried to broaden already-established viewpoints concerning coherence by integrating three conceptualized facets of coherence for a text: (a) cohesion (lexical and grammatical links, which Enkvist used as a foundation from the ponderings of Halliday and Hasan, 1976), (b) plausibility or interpretability (semantic association between the old and the new information), and (c) justifiability (logic).

Cohesion

Cohesion was defined as a quality of textuality — i.e. attributes that distinguish a text as a text in a text resulting from lexical and grammatical links (Halliday & Hasan, 1976; Connor, 1984; Enkvist, 1990; Lee, 2002). Text linguistics broadened the conceptualization of coherence into discourse analysis by including cohesion between sentences and paragraphs (Lee, 2002). Halliday and Hasan (1976) specified five major classes of cohesive devices: reference, substitution, ellipsis, conjunction, and lexical cohesion, among which reference was subcategorized into pronominal, demonstrative, and comparative reference; lexical devices were reiteration, synonymy, and hyponymy. Cohesion theory had been discussed and applied in studies of ESL/EFL students' compositions, which helped to identify the coherent features in the compositions by students from different cultural groups (Lee, 2003; Liu & Braine, 2005; Zhang, 2000).[3] These more defining aspects of research on coherence enabled researchers to give more specific pedagogical direction to teachers and educators concerned with improving composition teaching. The findings were synthesized in Chapter III.

Interpretability

Interpretability referred to the quality of a text enabling the readers to build up the association between the new knowledge and the old so that a text could be understandable. This facet focused upon the meaning delivery and semantic relationships between topics in sequential sentences of a text. Analysis of such relationships was

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[3] Other related studies are Achili, 2007; Crewe, 1990; Chen, 2008; Connor, 1984; Lee, 2002.

called *topical structure analysis*, which has been suggested as a means to teach coherence in ESL/EFL classes (Connor & Farmer, 1990; Lee, 2002). Topical structure analysis was developed from the topic-comment theory of the Prague School of Linguistics[4] (Lautamatti, 1978). Topical progressions, or the sequences of sentences, were mapped by Connor (1996), using a system of three distinct progressions: parallel progression, sequential progression, and extended parallel progression.

Justifiability

Justifiability required the writers' propositions to march out in a trustworthy order. Lindeberg (1985) suggested that whether an essay was convincing or not was not determined by the cohesive ties but in the ways propositions link into arguments. As a matter of fact, Toulmin (1956) proposed a model in his attempt to answer the question regarding whether there was one universal system of norms by which all sorts of arguments in all sorts of fields might be judged. His model was composed of claim, data, and warrant. Data were used to support the claim while warrant is the logical bridge between claim and data. Toulmin's model was identified as the best predictor of writing quality for students' compositions (Connor, 1990). It was also utilized to teach academic English writing in European and North American higher education and was shown to be

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[4] According to the Prague School linguists, topical structure analysis was conducted by distinguishing *theme* from *enunciation*. The term *theme* referred to "what the sentence is about" and the term *enunciation* referred to "what is said about" the theme. Themes indicated the known information, and enunciation added new information to the theme in such a way that old and new information was linked so as to make a coherent text. Later, the term *enunciation* was recognized as *comment* and the term *theme*, in the meantime, changed to *topic*, referring to the sentence topic, in contrast with the discourse topic (Hoenisch, 2004). Sentence topics, as units of meaning hierarchically organized in the text, progressed so that the discourse topic was developed (Lautamatti, 1978).

effective in guiding students towards assessing their own writing as well as a heuristic tool during their work on the compositions and academic papers (Hegelund & Kock, 2003, Saneh, 2009). A summary of the three facets of coherence is presented in the following table:

Facet	Definition	Categories and components
Cohesion	Textuality produced by lexical and grammatical ties	Reference, substitution, ellipsis, conjunction, and lexical cohesion
Topical Structures	The semantic relationships between sequential sentences	Parallel progression, sequential progression, and extended parallel progression
Toulmin's Model	An anti-syllogism logical model for claim strengthening	Claim, data, warrants, backing, qualifier and rebuttal

Table 2. Three Facets of Coherence.

Argumentative coherence

Coherence has been defined by linguists (Enkvist, 1990; Lee, 2002), as mentioned at the beginning of this chapter, to be features of text and their resulting effects to the audience. This definition seemed to some extent detached from the significance of the connotation of being factual in the concept, attaching, rather, more importance to the phenomenon represented by the concept. In other words, such a definition failed to demonstrate the factual aspect of the concept of coherence, only pointing to the phenomenon. As a concept in philosophy, coherence refers to one of the main features for

truth embodied in a statement. Such a concept is different from that of rhetorical studies which emphasized the mutual understanding between the speaker/writer and the audience. Nevertheless, even in a rhetorical study, it is more advisable to generate rhetorical strategies in a context where audience is regarded as a type, not an individual. In this dissertation study, the concept was examined regardless of audience. In this sense, the concept of coherence in its philosophical sense is appropriately supportive, considering its broader and cross-disciplinary coverage and its diachronic development in the philosophical field.

In philosophy, coherence is related with the identification of truth embodied in a statement. It is one of the main features to identify truthfulness of a statement. If the statement holds a fact, we say that it must be coherent, meaning the elements in the statement are coherent. Take a narration for an example: The butterfly was running in the marathon. There are three elements in this statement—character (the butterfly), action (running), and event (marathon)—which appear not to be coherent according to the semantic relationship among the three elements and by conventional correlation, so we may suggest that what is stated is not a fact; this is a false narrative statement. But what about argumentation? Toulmin identified three elements in the argumentation: claim, data, and warrant. Argumentative coherence is the concept concerning the relationship among the three elements.

Therefore, argumentative coherence is first a philosophical concept and then a concept in linguistics. From a philosophical view, it is close to one of the core issues: coherence theory of truth, which relates coherence to the relationship between propositions and mainly deals with the issue of whether the proposition is really the case

in reality (Shand, 2009), indicating the causality between events or phenomena in real life. From the above illustration, we also find that a statement is composed of three aspects: the linguistic form, the semantic relationship, and the propositional content. From this philosophical view was derived the definition of argumentative coherence employed in this study: the linguistic, semantic, and logical features of an argumentative text that enable the text to deliver trustworthy meanings. Enkvist (1990) suggested three dimensions to illustrate the construct of argumentative coherence. Cohesion was the first dimension. Interpretability was the second dimension indicating the semantic relationships between sentences in a text. In this respect, Topical Structure Analysis provided applicable procedures to interpret semantic relationships in the writing (Connor and Farmer, 1990). The third dimension identified by Enkvist is justifiability, echoed with Toulmin's Model as a framework to justify arguments (Ruszkiewicz & Lunsford, 2004). (See Appendix C for a composition example showing these three dimensions of argumentative coherence.)

A structural model of examining coherence for argumentations is illustrated as follows:
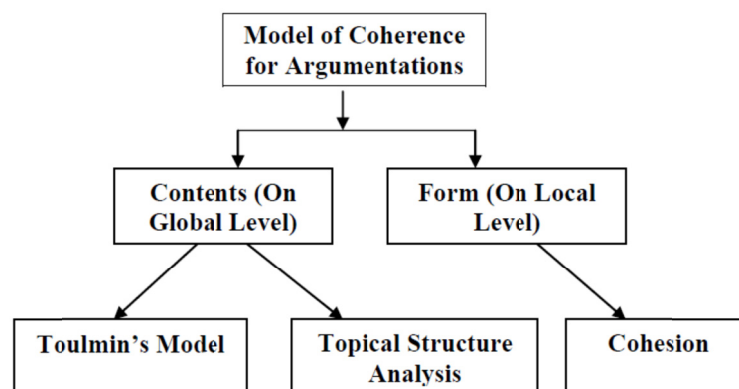
Figure 3. A structural model of argumentative coherence.

The above structural model is built with a top-down approach of conceptual analysis. If the approach is reversed into bottom-up and initiated with analyzing topical structures, the result of the conceptual analysis will be modified. Topical structure theory excludes how to paragraph in a text such that the theory is not adequate for the study of coherence. In other words, in the flow of thoughts in a text, we have to interrupt the flow with pauses. These pauses result in paragraphs. Therefore, topical structure analysis is good on the paragraph level, while on the text level, we need some additional theories to illustrate coherence.

The word *logic* came from Greek, where it meant "speech." This reminds us that logic has been embedded in speech and has been an indispensible component of speech (Heidegger, 2010). Now we refer to it as a necessary feature of any oral or written language to be interpretable and justifiable. Logic makes interpersonal communication between readers and writers possible. Logic is also the key concept to consider when examining textual coherence. Two theories may help us understand how logic can be materialized in a text: Halliday and Hasan's cohesion theory as explicit indication of logic in a text, and Toulmin's model as implicit guidelines to lead the writers' thoughts in a coherent way. Accordingly, we can modify the above structural model construed out of Carroll's coherence theory into the following model of coherence:
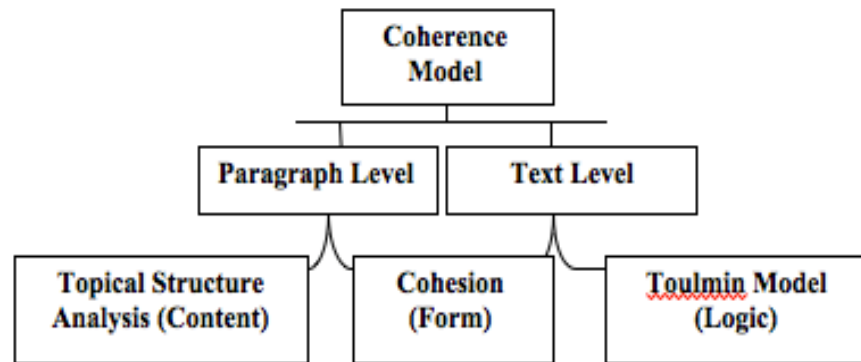
Figure 4. A revised structural model of argumentative coherence.

Coherence in Students' English Compositions

Coherence can be illustrated in as many ways as there are logical models. As previously analyzed, coherence can be defined with a multidimensional approach. Comparing and contrasting four versions of coherence definition, Bain (1890), Enkvist (1990), Carroll (1999), and Lee (2002) clarified the existent literature on understanding such a complex concept so as to pin down the version appropriate for my research context: argumentative coherence in college students' compositions. Enkvist's three facets of argumentative coherence were recognized as the conception of coherence applicable to gauge coherence using three indices: linguistics (form), semantics (meaning), and reasoning (logic). These three indices are used to examine how students' compositions are coherent in a comprehensive and supplementary way.

Linguistics (Form): Cohesive Devices

The first index, referring to linguistics or form, is cohesive devices. Cohesive

devices may be referenced to indicate explicit signals that show how coherence is

manifested in students' compositions. Carroll's (1999) cohesion theory states that at the

local level, a discourse is coherent if there are semantic relationships between successive

sentences. Those relationships are indicated by a range of categories of cohesion

(Carroll, 1999) in a lexically and grammatically overt inter-sentential mode

(Connor, 1984). Carroll (1999, 2007) cited Halliday and Hasan's (1976) categorization of

cohesive devices, which includes reference, substitution, ellipsis, conjunction, as well as

lexical chaining to textualizing a discourse. Based on this categorization, the table below

displays the five categories and subcategories.

Category	Example
Reference	
Pronominal	The woman lost track of her little boy at the mall. *She* became very worried.
Demonstrative	*That* was the worst exam I had all term.
Comparative	It's the *same* band we heard last week.
Substitution	My computer is too slow. We need to get a faster *one*.
Ellipsis	I wish I had more talent. My sister has a lot *more* than I do.
Conjunction	Melissa flunked out of school, so she is looking for a job.
Lexical	
Reiteration	I saw a boy win the spelling bee. The *boy* was delighted afterward.
Synonymy	I saw a boy win the spelling bee. The *lad* was delighted afterward.
Hyponymy	I saw a boy win the spelling bee. The *child* was delighted afterward.

Table 3. Categories of Cohesion.
(Source: *Psychology of Language*, by David Carroll, 1999, 2007)

Cohesive devices are just coherent markers which linguists with positivist heritage preferred due to its tangibility (Enkvist, 1990). Considering its being overt and explicit, novice writers on all levels of schooling have been taught how to write coherently by learning to use different types of cohesive devices in a text (Johns, 1986). Connor (1984) studied cohesion and coherence in English as a second language students' writing and found that although an ESL essay might be cohesive, it might not be coherent. The study also found that cohesion density with topic units did not discriminate between essays by ESL students and native speakers. One limitation of the study is that the cultural background of the ESL students was not taken into consideration.

L2 composition scores were found to be highly correlated with the number of lexical devices implemented (Liu & Braine, 2005; Zhang, 2000); lexical cohesion was the only cohesive feature that distinguished L1 and L2 writers (Connor, 1984). Using Halliday and Hasan's taxonomy of cohesive devices, Liu and Braine (2005) analyzed the use of cohesive devices in 50 argumentative compositions by Chinese undergraduate non-English majors. They found that the students were able to use a variety of cohesive devices, among which lexical devices formed the largest percentage, followed by references and conjunctives. The quality of writing was found to co-vary significantly with the number of lexical devices and the total number of cohesive devices used. However, certain problems were also identified in the writing in terms of the use of reference and lexical devices.

Lee (2003) compared cohesive devices in English narratives written by Chinese EFL students in Hong Kong and U.S. students. Differences in the use of referential devices of pronouns and demonstratives were found. Students from Hong Kong used

fewer such devices than the native English speakers. Lee attributed this lack of using

referential devices to linguistic features in Chinese writing, which utilizes these features

less frequently. Ellipsis and substitution are relatively low in Hong Kong student

narratives, though Lee attributed the results to the teacher's instructions rather than to

Chinese culture and language. To show cohesion, students from Hong Kong tended to

use overt connecting devices while native English speakers used action verbs and relative

clauses.

Semantics (Meaning): Topical Structure Analysis

A text may be formally cohesive, but it may not be meaningfully coherent (Enkvist,

1990). Therefore, the second index, referring to semantics or meaning, is utilized to

gauge meaningful coherence in a text. The second index is a semantic relationship of

topics in sequential sentences measured by topical structure analysis, which has been

recognized to be a good strategy for ESL students to revise their compositions (Connor &

Farmer, 1990). Topical progressions, or the sequences of sentences, were mapped by

Connor (1996) using a system of three distinct progressions as shown in the following

table:

Topical progression	Definition	Conceptual representation	Example
Parallel progression	Topics of successive sentences are the same, producing a repetition of topic that reinforces the idea for the reader.	<a, b>, <a, c>, <a, d>	At times absolute **honesty** may be difficult. **It** may even hamper progress and development. **Honesty** needs to be kept in mind because there is cause and effect relationship in this world.
Sequential progression	Topics of successive sentences are always different, as the comment of one sentence becomes, or is used to derive, the topic of the next.	<a, b>, <b, c>, <c, d>	Although there are **times** when you must say the partial truth**, most times** the social rules we have stop us from sharing what we truly believe. **Sensitive issues sometimes** require us to fib from time to time.
Extended parallel progression	The first and the last topics of a piece of text are the same but are interrupted with some sequential progression.	<a, b>, <b, c>, <a, d>	I live my life by **being brutally honest**. If I am asked a question I will answer truthfully. Although there are times when you must say the partial truth, most of the time the social rules we have stop us from sharing what we truly believe. Sensitive issues sometimes require us to fib from time to time. So is **honesty** always the best way to go?

Table 4. Topical Progression.

Topical structure analysis has been applied to discriminate the writing quality of essays. Significant differences have been found in the frequency of the three topical progressions between high-rated and low-rated essays (Witte, 1983a, b; Schneider & Connor, 1991). The results of the studies showed that more highly rated essays had a high proportion of sequential progression and an extended parallel progression, which "helps pull the essay back to its main theme" (Connor, 1996, p. 87).

In addition, topical structure analysis has also been identified as a teaching method for teaching coherence in students' compositions. It helps in self-, teacher- and peer-review since it raises the awareness of the meaning of individual sentences and their

interrelations as well as development of a text, and makes readers and writers per se critical of semantic associations in a text (Cerniglia, Medsker & Connor, 1990; Connor & Farmer 1990; Tipton, 1987). Such an analysis goes beyond the sentence to the text level. By examining the meaning relations between sentences, this procedure includes an examination of coherence based on textual features and encourages the revision of texts showing faulty or inappropriate topic progressions (Schneider & Connor, 1991).

Reasoning (Logic): Toulmin's Model

Coherence can be examined on a lexical and grammatical level, supplemented by semantic inspection of topical structures, but we are still concerned about whether the text is logically sound on the whole so as to be justifiable. Thus, the third index, referring to reasoning or logic, is introduced. The third index is the logical reasoning power of the text weighed by Toulmin's Model of *claim*, *data*, and *warrant* (Toulmin, 1956, 2003). Toulmin's model was selected due to the fact that it was identified as the best predictor of writing quality for students' compositions (Connor, 1990) and a useful strategy for students to write and revise their papers (Hegelund & Kock, 2003; Ruszkiewicz & Lunsford, 2004; Saneh, 2009).

Toulmin's informal logic, also called practical arguments, was intended to focus on justifying, as opposed to inferring, which is what syllogism is aimed to do. Toulmin believed that reasoning was less an activity of inference, but more a process of testing and sifting already existing ideas. His first three steps of arguing—claim, data and warrant—are actually just the opposite of the syllogism, as illustrated in the following table:

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Toulmin's Model	Definition	Example
claim	A conclusion whose merit must be established	If a person tries to convince a listener that he is a British citizen, the claim would be "I am a British citizen." (1)
data (evidence)	A fact one appeals to as a foundation for the claim	The person introduced in (1) can support his claim with the supporting data: "I was born in Bermuda." (2)
warrant	A statement authorizing movement from the data to the claim	In order to move from the data established in (2), "I was born in Bermuda," to the claim in (1), "I am a British citizen," the person must supply a warrant to bridge the gap between 1 and 2 with the statement: "A man born in Bermuda will legally be a British citizen." (3)

Table 5. Toulmin's Model. (Source: Toulmin, 1956, 2003)

Toulmin's argument pattern, or the macro-Toulmin's model (Hegelund and Kock, 2003) is composed of 6 parts. Their associations can be illustrated by the following figure:
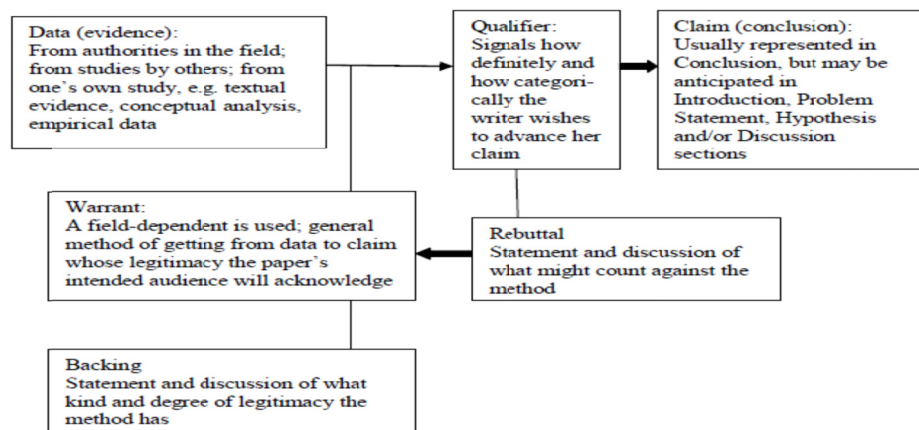
Figure 5. Toulmin's Model. (Source: Hegelund & Kock, 2003 p. 77)

As the figure indicates, the claim is usually presented in a Conclusion section, but may be anticipated in Introduction, Problem Statement, Hypothesis, and/or Discussion sections. In other words, the claim may repeatedly be presented in the above-mentioned parts in an academic paper (Hegelund & Kock, 2003). As for students' compositions, the claim is expected to be in the Introduction part and the Conclusion part. It is to express an opinion in the form of an assertion, preference, view, or judgment (Connor, 1996).

Data is the second category composed of three types: (a) theoretical data, (b) specific data drawn from others' studies, and (c) data drawn from one's own study, combined together to constitute the main body of the academic paper. To be specific, theoretical data refer to theories, concepts, and definitions drawn from authorities (esteemed individuals or current paradigms); specific data may include, depending on the specific field, textual evidence, conceptual analysis, examples, qualitative or quantitative empirical data, and so forth (Hegelund & Kock, 2003). As far as students' compositions are concerned, data, besides the mentioned above, also include experience, facts, statistics, or occurrences. Data are used to support the claim. When the data are challenged, the arguer must be prepared to further support claim by showing the relationship between data and claim by means of justification, or warrants (Connor, 1996).

Warrant is the bridge between the data and claim. In academic papers, warrant refers to the methods to collect, select, and interpret data. In different fields, different methods or warrants may be applied; thus, warrants or methods are field-dependent. Even in the same field, there should be variations to the methods or warrants (Hegelund & Kock, 2003). In composition studies, warrants are rules, principles, and typically general,

hypothetical statements that authorize the association between the claim and the data (Connor, 1996; Ruszkiewicz & Lunsford, 2004).

In addition to the three parts, which were obligatory according to Toulmin, there are three other optional parts included in the model: backing, rebuttal, and qualifier. Backing is the element to justify the authority of the warrant. Why the warrant is authoritative or trustworthy can be confirmed by theory. Theory is regarded as the synonymy of backing (Hegelund & Kock, 2003). Rebuttal refers to the circumstances that may undermine the force of supporting arguments (Toulmin, 1956, 2003). Those circumstances can be recognized as the fundamental problems of theory or paradigm as to whether certain methods are adequate to examine a question or phenomenon, or as specific questions concerning the theory, the practice or the ethics associated with a study. Until now, we have seen that warrant, backing, and rebuttal constitute the full-blown statement or discussion of methods (Hegelund & Kock, 2003). In the language of a research paper, warrant is the method, backing is the rationale for the method, and rebuttal refers to the limitations of the method in the study. In some cases, warrants are well accepted by the academic community, while in some other cases, they may not be so well-established, which leads to the use of the qualifier in a paper.

The qualifier indicates the strength of the claim conferred by the warrant (Toulmin, 2003). The qualifier doesn't need to be a passage but may appear as some phrases such as *This rather strongly suggests* or *A plausible interpretation would be* (Hegelund & Kock, 2003, p. 77). In students' compositions, words like *necessarily*, *certainly*, *very likely*, or *maybe* are used to indicate the strength of the claim (Connor, 1996; Ruszkiewicz & Lunsford, 2004).

Such a pattern was simplified by Connor (1990) into a model of claim, data, and warrant to examine students' English compositions' writing quality since, according to Toulmin, the three parts were obligatory in an argument (Connor, 1996; Ruszkiewicz & Lunsford, 2004). The result of the multiple regression analysis showed that the value associated with this model had the highest correlation with the ratings given by human raters. Toulmin's model was used to study writing in cross-cultural context, which compared argumentative writing in different cultures (Connor & Lauer, 1985, 1988; Connor, 1990; Connor, 1991). All of these studies showed that Toulmin's model was a strong predictor for the writing quality of students' argumentative essays. Oi and Kamimura, (1997) had a pre-test and post-test study of Japanese college students' argumentative essays and found that explicit instruction of Toulmin's model was effective in teaching Japanese college students' essay writing. Oi (1999) also completed a comparative study between Japanese and U.S. college students' argumentative writing. She found that, compared with U.S. students, Japanese students' essays lacked in warrant and data, which was owed to the differences between Japanese and U.S. culture.

Contrastive and Intercultural Rhetoric

Goodenough's (1964) widely accepted definition of culture explains it as a set of rules and patterns shared by a given community. As far as writing is concerned, researchers have associated writing with cultural conventions, rhetorical conventions, academic community requirements, and writing classroom cultures, all of which constitute the concept of discourse. According to social constructionism, writing is an

activity that happens within a certain social discourse and unavoidably is impacted by the

social environment the writer is in (Cooper, 1999). Language is the medium which

transcribes writers' thoughts into texts; language is also the carrier of culture, with

cultural notions embedded in its form and meaning. As the medium, language inversely

brings about variations in writing composed by writers using different first languages. As

Lee (2002) stated, ESL/EFL students' coherence patterns in their English writing may be

different from native speakers due to L1 impacts.

Connor (2004b) explained contrastive rhetoric as the examination of similarities

and differences in writing across cultures (Connor, 2004b). According to Allan Purves

(1988), the concept of contrastive rhetoric was derived from Whorfian hypothesis that

culture influences thinking, but interviews with Robert Kaplan, the founder of contrastive

rhetoric, revealed that he was inspired by Christensen's (1965) generative rhetoric of the

paragraph[5], which encouraged Kaplan to extend contrastive analysis from the sentence

level to the paragraph level. Later research developed the research scope to the range of

texts (Connor, 2002).

Contrastive rhetoric was initiated by studies in second language writing, which

identified problems in composition ESL students encountered by comparing their

thinking patterns with those of English rhetorical conventions. Differences were found in

rhetorical conventions across cultures, which were identified as the causes that made

ESL/EFL students' writing look different from the native perspective (Atkinson, 2000).

This also justified the necessity of embedding English rhetorical conventions in English

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[5] According to Christensen, there were some templates, according to which paragraphs
could be generated. One of the templates was introductory sentences + supporting details
+ concluding sentences.

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as second language composition instruction. In the past 40 years of research history, contrasts were more highlighted in the research studies. By contrast, ESL students' native rhetorical conventions were explored and their impacts on second or foreign language learning were analyzed. During this process of mainly contrasting as well as comparing, ESL students' compositions were better perceived, and implications for ESL writing instruction helped instructional modifications.

This study of coherence in compositions by Chinese and U.S. college students was approached from the contrastive and intercultural rhetoric perspectives. Contrastive rhetoric was explained as an examination of similarities and differences in writing across cultures in terms of cultural and rhetorical patterns (Connor, 2004a). Such a research direction was initiated by studies in second language writing, which identified problems in ESL students' compositions by comparing their thinking patterns with those of English rhetorical conventions (Kaplan, 1966, 1968). A further assumption included that there were different rhetorical patterns in different languages and cultures, and those patterns were transferable to second or foreign language writing. My study proposed that Chinese EFL students' English writing might be impacted by Chinese cultural and rhetorical conventions. The research question in this dissertation—that there were differences between the coherence patterns in the English essays written by Chinese and U.S. undergraduates—resulted from this proposition.

Intercultural rhetoric was derived from contrastive rhetoric, broadening the contrastive rhetorical study into different genres, e.g. argumentations, exposition, narration, business letters, and grant proposals (Connor, 2004b). The concept of culture was also redefined to include disciplinary and classroom cultures, which were found to be

more influential on students' writing than national cultures (Connor, 2004b). Li (2008) enunciated the developing trend of contrastive rhetoric to study rhetoric interculturally and the shift of rhetorical research direction from contrasts to intercultural communication (Connor, Nagelhout, & Rozycki, 2008). Connor (2002) introduced the concept of intercultural rhetoric as a new direction in contrastive rhetorical research. Connor (2002) proposed that future studies should be based on the notion of cultural fluidity, one of the key concepts in post-modern cultural studies, aside from fragmentation, discontinuity, multiplicity, and plurality.

Atkinson (2004) proposed a model of culture for contrastive rhetoric that examined ''big'' culture versus ''small'' culture. "Instead of focusing on the big culture— i.e., national or ethnic culture—intercultural rhetoric research needs to consider the complexly interacting small cultures in any educational or other intercultural situation" (Connor, 2004b, p. 292). By citing Holliday (1994, 1999), Atkinson showed how small cultures—i.e., classroom culture, disciplinary culture, youth culture, student culture, and so forth—interacted with the national culture (Atkinson, 2004). Ethnographic studies of disciplinary and classroom culture should also be included in the research in addition to text analysis in a cross-cultural context (Connor, Nagelhout & Rozycki, 2008). From this proposition, the second research question of this particular study's results, which aims to inquire about the associations of Atkinson's big culture and small culture on Chinese students' English writing, including the inquiry about the linguistic and rhetorical features since language and rhetorical conventions can be regarded as part of culture. The second research question addresses the cultural, linguistic and rhetorical factors associated with Chinese students' English writing.

Therefore, this study conducted cultural analysis of factors associated with Chinese college students' writing. Components of cultural analysis are illustrated in Table 6.

Cultural analysis	rhetorical	Chinese rhetorical conventions' impacts
	cultural	Ideological impacts
	linguistic	Chinese linguistic impacts

Table 6. Components of Cultural Analysis.

Cultural analysis in this study involves analysis of association of Chinese rhetorical conventions with Chinese college students' English writing. These rhetorical conventions are described in Chapter III. Cultural factors are mainly ideological. Collectivism has been associated with Chinese people's English writing, which represented Eastern values and beliefs. Linguistic factors refer to Chinese linguistic features in Chinese writing transferred to English writing, which makes Chinese students' English writing different from native English speakers'. How these three components are associated with Chinese students' English writing are reviewed in Chapter III with reference to previous studies in this area.

Chapter III

The Research Context:

Cultural Conventions, English Writing, and Coherence

This dissertation examines the relationship between Chinese cultural conventions and Chinese students' compositions in English. I identified coherence as a construct to reflect this relationship. Therefore, the review of literature in this chapter is a look at the research contexts concerning Chinese cultural conventions, Chinese students' English compositions, and coherence. Composed of four parts, this literature review first identifies three theories as underpinning this study. The three theories are language relativity or Whorfian Hypothesis, the social theory of language, and the semiotic theory of culture. Then, this review explores those Chinese cultural conventions recognized as influential by contrastive rhetorical studies in English and Chinese contexts. Next, this review illustrates research on Chinese students' academic writing in North American academic institutions to throw light upon strategies and concepts associated with Chinese students' composition studies. Finally, coherence studies of compositions are reviewed so as to obtain some implications of making theoretical and methodological choices for this dissertation study. This literature review was expected to lay conceptual, theoretical, and methodological foundations for the study.

The Underpinning Theories for Contrastive Rhetoric

Rhetoric is defined as the choice of linguistic and structural aspects of discourse—chosen to produce an effect on an audience (Purves, 1988). According to Purves, rhetoric is a matter of choice to produce certain effects on readers as opposed to those that are determined by lexical and grammatical structures. Contrastive rhetoric, a subset of text linguistics, examines the dynamics of writing between different language systems and cultures. It studies rhetorical patterns in different cultures and languages, and investigates how two languages interact in the writer's production when the writer knows two or more languages.

Purves (1988) explained the rationale for contrastive rhetoric, mentioning two comparative studies of writing, Scribner and Cole's (1981) *The Psychology of Literacy*, and Heath's (1983) *Ways with Words*. In those two studies, the relation of culture to discourse, particularly to written discourse, was examined. Both studies came to a key overarching point: different cultural groups have different ways of using and perceiving written texts. The cultural differences in written discourse are manifested in two aspects: what is written and how it was written.

The Theory of Linguistic Relativity

The theory of contrastive rhetoric was originated from the theory of linguistic relativity, associated with the names of German educator, linguist, and philosopher Wilhelm von Humboldt (1767-1835); humanist, linguist, and anthropologist Edward Sapir (1884-1939); and linguist and anthropologist Benjamin Whorf (1897-1941). Whorf

claimed that "culture, through language, affects the way in which we think, and

especially our classification of the experienced world" (Gumperz & Levinson, 1996, p. 1).

As the immediate theoretical underpinning of contrastive rhetoric, the Sapir-Whorf

hypothesis of linguistic relativity, also called Whorfian hypothesis, suggests that different

languages affect perception and thought in different ways (Connor, 1996). Benjamin

Whorf, a student of Sapir's, elaborated on Whorfian hypothesis as follows:

> This study shows that the forms of a person's thoughts are controlled by
> inexorable laws of patterns of which he is unconscious. These patterns are
> the unperceived intricate systematizations of his own language – shown
> readily enough by a candid comparison and contrast with other languages,
> especially those of a different linguistic family. This thinking itself is in a
> language – in English, in Sanskrit, in Chinese. And every language is a
> vast pattern-system, different from others, in which are culturally ordained
> the forms and categories by which the personality not only communicates,
> but also analyzes nature, notices or neglects types of relationship and
> phenomena, channels his reasoning, and builds the house of his
> consciousness. (Whorf, 1956, p. 252)

A number of psychologists, including Glucksberg (1988) and Chiu, Leung, and

Kwan (2007) had analyzed the Whorfian hypothesis into two aspects of meanings:

language relativity and language determinism. Glucksberg (1988) challenged language

relativity and stated that the reasoning of the hypothesis was lacking in sound basis and

that the relationship between language and thought was so complex that it deserved more

substantial research. In order to analyze the theory of language relativity and specify how

language and thought were related, he proposed a concept of *language determinism*,

broken down into six propositions:

1. There is no inherent structure in people's experiences: perceptual
   order emerges when people organize their experiences with mental
   categories.

2. Language is a major cognitive tool people use to categorize their experiences.
3. As a language evolves, it develops a coherent internal logic.
4. The internal logic of a language embodies a metaphysics or naïve conception of the reality; as such, the internal logic of a language stands in isomorphic relation to that of its associated culture.
5. Markedly different languages evoke in the mind of its speakers different mental representations of similar linguistic referents.
6. Language constrains the development of nonlinguistic cultural norms. (Chiu, Leung & Kwan, 2007, p. 668)

Despite the fact that the basis for the Whorfian Hypothesis was tenuous, researchers still found considerable evidence that language in its generic sense, under some conditions, may affect human thoughts, memory, perception, categorization and problem solving (Chiu, et al. 2007). Furthermore, researchers posited that "the availability of certain structural properties in a language is important but not sufficient for it to affect cognitions" (p. 669). Further research found that people with and without the knowledge of Chinese characters described Chinese characters in different ways, researchers submitting that "grammar and vocabulary limit the tools that are available to speakers of the language for constructing and negotiating meanings" (Chiu, Leung & Kwan, 2007, p. 670).

The Whorfian hypothesis has also been examined by cognitive and cultural psychologists, who studied the validity of the hypothesis by research in cognitive psychology and consistently found some differences between Asians and Westerners. In Nisbett's (2003) book, *The Geography of Thought: How Asians and Westerners Think Differently … and Why*, Nisbett stated that philosophers, historians, and anthropologists held that East Asians and Westerners have maintained distinctively different systems of thought for thousands of years. Contrast of such was demonstrated in the citation below:

European thought rests on the assumption that the behavior of objects –
physical, animal and human – can be understood in terms of
straightforward rules. Westerners have a strong interest in categorization,
which helps them to know what rules to apply to the objects in question,
and formal logic plays a role in problem solving. East Asians, in contrast,
attend to objects in their broad context. The world seems more complex to
Asians than to westerners, and understanding events always requires
consideration of a host of factors that operate in relation to one another in
no simple, deterministic way. Formal logic plays little role in problem
solving. In fact, the person who is too concerned with logic may be
considered immature. (Nisbett, 2003, p. xvi)

The different systems of thought, also called habits of thought or thought

processes in Eastern and Western cultures, were investigated in cognitive research.

Though the inferences made by the researchers were still tentative, they still garnered

attention from cognitive psychologists (Gauvain, Beebe & Zhao, 2011). The findings and

inferences acquired from the studies will be reviewed respectively in the following

sections of this chapter, as they are pertinent to topics concerning the Eastern and

Western rhetorical contrast.

A number of other theories concerning language, culture, and literacy are

identified and discussed in order to underpin studies in contrastive rhetoric, including this

dissertation study. Saneh (2009) stated that no underpinning theories had been recognized

for contrastive rhetoric, but in his dissertation he listed three theories informative to his

study. They are the social theory of language, the semiotic theory of culture and the

theory of situated literacy. I found two of the theories were good enough to explain to

some extent the rationales for my contrastive rhetorical study.

The Social Theory of Language and the Semiotic Theory of Culture

The social theory of language was developed by a Russian philosopher of language and literary critic, Mikhail Bakhtin. Bakhtin (1981, 1986) stated that texts and utterance were interactive with the linguistic surroundings as well as social or cultural environments, in addition to being individual pure linguistic elements. In view of the socio-cultural aspect of language (Bakhtin, 1986), Lotman (1990) developed the social theory of language and furthered our understanding by conceiving of text as the semiotic sphere to reflect or encapsulate cultural codes as well as the interaction between the writer and the social discourse. The social theory of language has been included in the inquiries about language learning and education, but it hasn't been given enough attention in the research of ESL/EFL writing (Senah, 2009), especially in EFL writing studies. Usually, in the research context of EFL writing, language was considered to be a fixed and structured linguistic system, which is reproducible and repeatable. Lotman (1990), however, disagreed with this notion of language, suggesting instead that text was unrepeatable. This said, we have to face the fact that it is a must for a foreign language learner to learn the language per se while at the same time the culture carried over by the language in order to be adequately literate in the foreign language.

 Attention to the social theory of language and text has recently been given to inform foreign language education (Wertsch, 2006). Wertsch (2006) regarded the interplay between the word and linguistic surroundings as the local level of dialogues while the communication between the word and the social culture was looked upon as collective dialogues. The acquisition of local dialogue can be accomplished by studying authentic foreign language materials, but collective dialogue can only be acquired in

social communication with the foreign language world. To elaborate upon the two theories and the integration of the theories in foreign language learning, the following concepts in the theories are explained as follows:

Word as the dynamic communicative utterance, not just a static lexical element. The social aspect of a word was the departure point for studying social theory of language (Danow, 1991). From word to culture, the progression has also included sentences made of words, and text composed of sentences. According to traditional linguistics, the word was a static lexical element, but to Bakhtin (1984) the word was defined by the communicative intent of the speaker or writer. In other words, its meaning was related with the semantic discourses the word was in, that is, what preceded the word as well as what followed. If the semantic discourse changed, the word itself would also be changed in meaning or pronunciation. From this, Bakhtin (1986) generated the social theory of language that a text equalized with the utterance was defined by and had interaction with its social discourse, not just by its linguistic and semantic discourse. This interaction was called *dialogicity*, and these two kinds of discourses were designated as monologism and dialogism.

Monologism vs. dialogism. Monologism was the mechanism of textualization characterized by applying the linguistic and rhetorical rules to establish semantic associations within a text, following the writer's or speaker's self communicative intents. This mechanism was genre-related and relatively static in a certain historical period (Lotman, 1988). In the monologic function of text, some rhetorical features have been

well-established and elevated to be canonical. Learners were required to adopt these features and their performance would be evaluated in view of the consistency of their rhetorical patterns with the canonical ones (Wertsch, 1991). Dialogism referred to the communication between writers and the generalized collective dialogue known as readers, institutions, and the social ideology. In the dialogic function of text, text was imagined to be the sphere for social interaction between the writer and the expected readers who held beliefs, values and ideological expectations in consistency with the academic community. Monologism intertwined with dialogism in the writer's mind in which the well-established rhetorical framework interplayed with the ideological choices the writer could make in a certain social discourse (Lotman, 1988).

Text as the semiotic sphere of culture and the social approach to mind. Text as the product of a cognitive process had been conceived as the semiotic sphere reflecting and encapsulating the cultural modes and social interaction (Lotman, 1990). This is in alignment with the Vygotskian (1978) social approach to understanding human mental functioning as framed by culture, history and institutions. Text, the product of human mental functioning, provides the sphere for investigating the writer's personal experiences called as small culture, institutional rules, and ideological characteristics in a certain historical period (Bakhtin, 1986). In this sense, text was no longer only the static and generable linguistic structures, but, more importantly, a social, historic, and interactive construct. What is perceived as text in one cultural setting may not be proper text in another cultural situation.

Thus, contrastive rhetoricians haven't acknowledged social approaches to language and mind as theoretical underpinnings. However, in a recent study, Senah (2009) drew upon the social theory of language, semiotic theory of culture and contrastive rhetoric to underpin his study of Iranian graduates' intercultural experiences of academic English writing in North America. Senah's study aroused my attention to these theories and the associations among them. Triangulating the theoretical underpinnings of my study better informed the discussions of the research results. The consistency of the theoretical positions to support contrastive rhetorical assumptions increases the credibility of this study. Until now, researchers have concentrated upon research contexts in North America. As a result, I applied these theories to explain EFL writing in China to shed light upon the possible factors related to EFL learners' learning difficulties in a non-English speaking country.

Contrastive Rhetoric in Chinese and English Contexts

Whorf's research, as well as Kaplan's and Purves's, among many, may lead us to several questions, particularly as they apply to comparisons of Chinese and English specifically: Are there indeed different thinking patterns in different cultures? If they exist, how then do they influence cross-cultural writing, especially in English and Chinese contexts? What are these influences like in English and Chinese contexts? And how do scholars contrast Chinese and English rhetoric? Inquiries into these questions have yielded at least three themes: (a) schemata, at least in a general sense; (b) cultural schemata; and (c) contrastive rhetorical features in Chinese versus English. The link

between the issues and the outline of this review part can be illustrated by the following

chart:
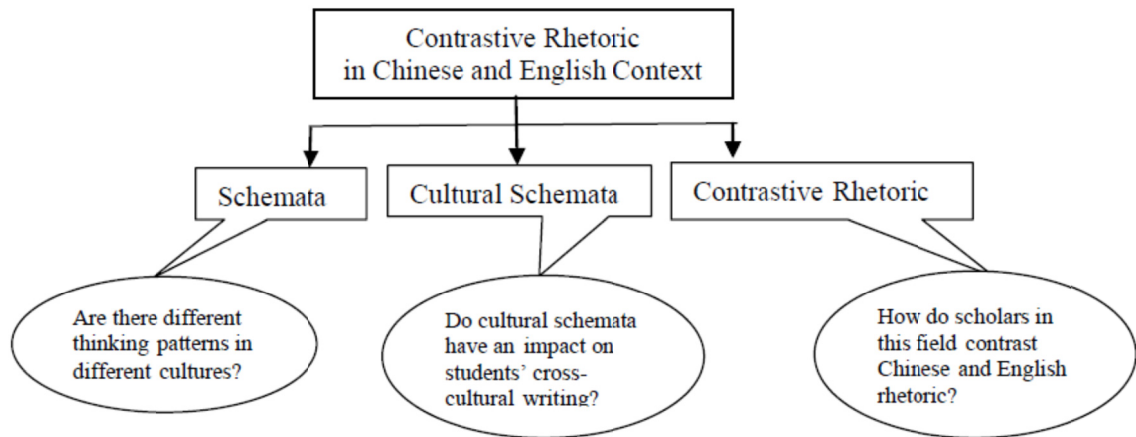
Figure 6. Outline of the review.

Schemata

    The inquiry into contrastive rhetoric was first started by exploring different

thinking patterns in ESL students' writing. In 1966, Kaplan analyzed the English

expository writings of some 600 ESL students. In that study, by comparing ESL students'

English writings with English rhetoric textbooks, Kaplan identified five distinct rhetorical

patterns: English, Semitic, Oriental, Romance, and Russian. Thus, Kaplan suggested that

rhetoric varies from culture to culture, and that the rhetoric in the first language can be

transferred to students' second language writing. Kaplan's study was a continuing pursuit

of the Sapir-Whorf hypothesis, which postulates that differences in the syntax and

semantics of a language may influence the thought patterns of native speakers and writers

of different languages (Whorf, 1956).

However, Kaplan's finding of eastern rhetorical pattern being circular was challenged by recent studies (Kong, 1998; Zhu, 1997; Yang and Cahill, 2008), which examined Chinese business letters and Chinese students' English expository essays. Zhu (1997) and Kong (1998) argued that business letters written in either Chinese or English by Chinese speakers followed the linear pattern rather than the circular pattern that Kaplan (1966) mentioned. Yang and Cahill (2008) further found that ancient Chinese rhetoric was linear, thus influencing Chinese college students' English expository essays to be presented with linear rhetorical structure. Such a contradiction necessitated the introduction of genre analysis and *tertium comparationis* into contrastive rhetorical research which guaranteed that "an apple was compared with another apple" (Connor, 2004b, p. 291). It also warned us of the importance of the interaction between big national cultures, such as cultural and rhetorical conventions, and small cultures, such as classroom culture and disciplinary culture (Connor, 2004b). The same rhetorical conventions may be treated in different ways in different classrooms or different disciplines by different instructors so as to result in different effects in students' writing.

Further exploration opened up a new horizon in the issue of culturally different logic in western alphabetic languages and Chinese logographic language (Shen, 1989). This so-called new horizon was actually existent before the inception of contrastive rhetoric, actually traced to the beginning of the 20th century when imagism was found in poems by Ezra Pound, Amy Lowell, and others. Pound first learned Japanese and then delved into Chinese characters and Chinese poems, from which his poetic imagism was inspired (Ayers, 2004).

Chinese poems highlight the use of the technique of 意境 *yi jing*, or creating a picture in the mind, which accounts for the Chinese nonverbal, pictorial logic. Shen (1989) explains that it is a thinking process conducted largely in pictures and then transcribed into words. The picture described by the poet is taken over and developed by the reader. The imagination of the author and the imagination of the reader are thus overlapping (Shen, 1989, p. 464).

In English writing, logic is conceptualized by the arrangement of propositional content and managing the systems of cohesion and coherence. To some extent, this conceptualization is culturally defined (Kaplan, 1988). In the United States, two traditions are reflected in the teaching of writing: one is Aristolean syllogism and the other is the Galilean hierarchical system (Wilkerson, 1986). Propositions are inferred from the major premise and minor one. Organizations of the textual structures should be hierarchical. Great value is placed "on clarity and precision in the framework of a rigorously logical system" (Kaplan, 1988, p. 290). In contrast with Chinese rhetorical conventions attaching much importance to linguistic beauty of the text, "In the United States,…the focus in writing, for generations of students, has been on the *structure* of propositions; it has only incidentally given attention to the *language* of the text" (Kaplan, 1988, p. 290).

Reviewed above are findings in studies of contrastive rhetoric. By looking outside, I found a binary opposition concerning the eastern-western contrast of schemata proposed by cognitive psychologists, whose works should have been attended to but not sufficiently elucidated in the field of contrastive rhetoric. The binary opposition is

holistic vs. analytic (Nisbett, 2003). It was inferred that Easterners tend to have a holistic

habit of thinking while the westerners tend to have an analytic one. The holistic thinking

means observing the world from a holistic view, or locating the focal object in an

environmental network. The analytical thinking refers to the tendency to decontextualize

the observation of the world, or to consider the world composed of independent objects.

The following summarization is more descriptive:

> Holistic thought involves an orientation to the context or field as a whole,
> including attention to relationships between a focal object and the field,
> and a preference for explaining and predicting events on the basis of such
> relationships. Analytic thought involves a detachment of objects from
> contexts, a tendency to focus on objects' attributes, and a preference for
> using categorical rules to explain and predict behavior. (Henrich, Heine &
> Norenzayan, 2010)

When these two types of thinking habits are employed to give explanations, two

types of explanations can be put forward: distal and proximal explanations (Norenzayan,

Choi & Peng, 2007). Dismal explanations refer to "historical analyses that involve social,

economic and even geographic factors" while proximal explanations refer to "individual-

level processes, including beliefs, knowledge, social experiences, and psychological

orientations that have been shaped by these historical developments and are identifiable

at the individual level" (p. 585).

Cultural Schemata

A widely accepted definition of culture explains it as a set of rules and patterns

shared by a given community (Goodenough, 1964). Cultural schemata refer to the

ideological modes well-established in a cultural convention. People's thinking in their

culture is to some extent prescribed by the ideological background knowledge. China's 5000 history accumulated a number of such ideological modes that have impact upon Chinese people's thinking and, accordingly, rhetoric (Lin, 1999).

In order to keep order among the highly diversified peoples on that vast land, ancient China's emperors needed some rules. Confucius met this need by providing rules for all walks of life in his 四书五经 *Sìshū Wǔjīng,* or *Four Books and Five Classics*.

Those rules formulated a framework within which Chinese people dealt with their everyday life. There was no exception for writing. Since writing was so significant for personal development, specific and strict rules of Chinese writing were established. 八股文 *Baguwen* or "the eight-legged essay" (See Appendix D for an example) was a typical example to illustrate the rules of writing in Chinese history. Nowadays, students are not asked to write according to those rules anymore, but some simplified versions are still in use by some teachers of Chinese to teach Chinese composition. Some teachers of English also try to apply these rules to teach English composition since similarities between Chinese expository essays for college entrance exams and the U.S.'s Graduate Record Examination (GRE) writing were found (Hu-chou, 2000).

Confucianism was the school of philosophy that influenced or even dominated Chinese cultural conventions. It advocated collectivism and harmony among people, who were organized in a hierarchical relationship and took reciprocal obligations. Mutual respect was highly valued, and so was the willingness to participate in the making of communal harmony (Ames, 1991). Confucianism suggested that education should

emphasize teaching by strict moral models (Young, 1994), which helped to consolidate the social hierarchy and communal harmony.

Oliver (1971) analyzed traditional Chinese culture and concluded:

Rhetoric in Chinese society thus came to be very much akin to sheer propriety. The utility which rhetoric was to serve was the maintenance of harmony. The way to this goal was through ceremony, etiquette, and methodology. There was a right way of doing things – a way that was established and accepted. When behavior conformed to this pattern of expectation, the individual's relations with his fellows would be predicable and dependable. Accordingly, the community would have a decent and decorous stability. (p. 145)

Bloch (2004) studied Chinese people's arguments in cyberspace and found that examples of argumentation associated the interests of the individual with the interests of the group. The study of the relationship between Chinese culture and rhetoric revealed the relationship between group identity and individualism when Chinese people recognized one individual Chinese person's tragic encountering might reflect some social prejudice against Chinese as a cultural group. Such a concern united Chinese people to fight against the potential racism collectively. The point in this study has been "the extent to which a person sees herself as part of a group rather than as an isolated individual, as is often seen in the West" (Bloch, 2004, p. 69).

Richard Nisbett (2003) restated, with his cognitive lens, a belief held by philosophers, historians, and anthropologists that westerners and East Asians have maintained different world views for thousands of years:

European thought rests on the assumption that the behavior of objects – physical, animal and human – can be understood in terms of straightforward rules. Westerners have a strong interest in categorization, which helps them to know what rules to apply to the objects in question, and formal logic

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plays a role in problem solving. East Asians, in contrast, attended to objects in their broad context. The world seems more complex to Asians than to westerners, and understanding events always requires consideration of a host of factors that operate in relation to one another in no simple, deterministic way. Formal logic plays little role in problem solving. In fact, the person who is too concerned with logic may be considered immature. (p. xvi)

This short paragraph is aimed at illustrating differences of habits of thoughts under eastern collectivism and western individualism. According to Nisbett, Easterners think in a non-logic intuitive way, oriented in the ideology of collectivism and reversely reinforcing the ideology among people. But he says westerners do likewise, shaping (bear in mind the knowledge of Aristotle's logic) their habits of thinking and facilitating the instillation of such ideology in people's minds. Such may to some extent account for the persistent binary philosophical systems surviving in two cultures respectively.

Contrastive Rhetoric of Chinese versus English

Three phenomena are under discussion in contrastive rhetoric: *audience*, *genre*, and *rhetorical structure*.

With respect to audience, two questions are investigated: who has the authority to write, and who may be addressed. Genre concerns what may be discussed and in what form. Selection and arrangement of evidence is the focus of the third set of questions which address the issue of rhetorical structure (Kaplan, 2005). Audience can also be explained as the participants in the activity of writing, including the author and the reader. The relationship between those two sides was claimed to be different in different cultures.

In English and Chinese contexts, research findings show that the two sides are expected to take different responsibilities in English culture from those in Chinese culture.

John Hinds (1988) introduced the concept of reader versus writer responsibility by suggesting that in Japanese, and probably in Chinese, the reader was generally more responsible for effective communication than the writer. Hinds also believed that English writers or speakers had the responsibility to make clear and well-organized statements; thus, if there was any breakdown in communication, it is "because the speaker/writer has not been clear enough, not because the listener/reader has not exerted enough effort in an attempt to understand" (p. 143).

The difference between expectations for writers in Chinese and in English has been explored by other researchers. Michael Reddy (1979) claimed that when communication failed, the blame was often put on the sender for failing to organize his thought or feelings properly. The reverse has been shown in Asian culture. Gregg's (1986) students in Mainland China "viewed the American near-obsession with clarity and explicitness as inappropriate for the supposedly educated readership of academia" (p. 357)

Hinds believed that reader-responsibility is relevant to Chinese, at least Classical Chinese, which makes the readers to make inferences by their own knowledge. Snively (1999), in her research, confirmed the following ideas:

First, the Chinese language is ideographic, pictorial, concrete, and consisting of separate characters with few grammatical markers, so the reader is expected to pull the words together in his own mind, make his own jumps, and rely on word order to show the connections (Taborek & Adamowski, 1984, p. 91). A list of grammatical markers present in European languages but absent in Chinese was presented (Taborek & Adamowski,

1984; Tsao, 1983; Li & Thompson, 1982), among which are (a) no tense or number markers on verbs; (b) fewer common pronouns; (c) more use of ellipsis; (d) no equivalent to *the* or *that*; and (e) less use of relative clauses.

In addition, Chinese characters are not inflexible. If you reverse the order of two words, the meaning will be changed profoundly. The same word can be used as several parts of speech, thus taking on many shades of meaning, with the exact meaning becoming clear only from context. Many other languages have the same features, but considering its 3000 years of both written and spoken tradition, Chinese tends to be more complex in terms of these features (Karlgren, 1962, pp. 68-69). Snivel (1999) concluded that lack of markers and potential ambiguity of many words meant Chinese readers have to interpret on their own when they were reading.

Second, the widespread use of metaphor means Chinese people are unwilling to talk about their feelings directly, but rather metaphors are implemented in order to avoid directness. Indirectness is valued highly in Chinese writing; one shouldn't state one's opinion directly, as such may be considered rude, abrupt, or unaesthetic. Snively (1999) suggested four writing practices that show this indirectness: (a) an overall tendency to begin very generally; (b) a reliance on history in the introduction; (c) a tendency to shift abruptly after making one's major point; and (d) impressionistic conclusions. In addition to these four practices, another element in Chinese writing is the use of rhetorical devices such as personification, parallelism, rhetorical questions, analogy, and metaphor which make Chinese writing indirect and totally different from English writing which values the style of directness, conciseness, and clarity.

Third, pithy writing requires the reader to read between the lines. Current Chinese

writers will quite naturally follow that style. The technique of *yi jing* 意境, of creating a

picture in the reader's mind, also leads to reader-responsibility. As in poetic or literary

works in any language, the writer suggests; the reader also does some creative work,

pulling together the words to create a mental picture.

All in all, Chinese language and its literary tradition have combined to create a

situation where the sophisticated writer strives to be subtle and suggestive, rather than

explicit, and the reader expects to be challenged by this highly-skilled subtlety. For the

writer, to be more explicit would be condescending, and thus disrespectful, to the reader.

Concerning this issue, applied cognitive scientists had their perspectives rooted in eastern

and western rhetorical conventions (Lloyd, 1996). In ancient China, rhetoric was the

discipline to inform intellectuals of how to persuade the emperors to accept their policy-

making suggestions. Since the audience was the emperor and other intellectuals, the

rhetorical choices should be very academic and complex. To the contrary, in ancient

Greece, the rhetorical conventions were rooted in the tradition that a public speaker was

supposed to persuade the public to accept his promotion. Since the audience was the

public of all social status, the speaker was supposed to use simple and clear language so

that he could be understood, which generated the western rhetorical convention of clear

and simple style.

Genre analysis was recognized as an important approach in intercultural rhetorical

research in that it made the analysis rational by comparing the same genre in different

languages and cultures (Connor, 2004b). Readers can be better informed of the extent of

similarities and differences concerning the rhetorical structures of the same genre in different languages. L1 data have produced convincing evidence for the existence of different rhetorical patterns across languages in terms of genres. Research on argumentative, expository, and narrative writing, as well as business letters has been extensive. Regarding argumentative writing, Spack (1984) concluded that Asians preferred gaining merit by literary style, while North Americans preferred logical argument. Liu (2007) in his study found that there was no difference of thesis placement between Chinese and U.S. junior high school students' native argumentative essays.

Studies of Chinese writing instruction history found that contemporary Chinese writing instruction follows Anglo-American traditions. In his recent studies on classical Chinese text structures and contemporary Chinese composition textbooks, Kirkpatrick (1997) claimed that contemporary Chinese textbooks on composition no longer advised the students to use 起承转合 *qi-cheng-zhuan-he* nor 八股 *bagu* text structures but

suggested "a direct approach to the opening and closing of a text, clear arrangement of ideas, and the linear structure of both deductive and inductive reasoning" (p. 322). You's (2005) study examined the historical formation of modern Chinese writing instruction and argued that the introduction of Western rhetoric, largely found in Chinese scientific texts, into China in the beginning of the twentieth century did enrich modern Chinese rhetoric in Chinese writing instructions.

Exposition was similar to argumentation since both of them need to use evidence or grounds to support or strengthen the claims. Research findings point to the differences between Chinese expository writing and its English counterpart. Chinese expositions

often follow some well-established templates, among which are the classic eight-legged essay, four-part essay, and three-part essay. Rhetoric devices of analogy, metaphors, similes, rhetorical questions, personifications and parallelism are pervasive in Chinese expositions (Fagan & Cheong, 1987).

In 1968, Kaplan wrote a paper which reported his research on Chinese ESL students essay writing (Kaplan, 1968). In that paper, he "explicitly related the indirectness of English writing by Chinese students to influence of the classic eight-legged essay" (Lin, 1999, p. 39). The eight-legged essay was first invented as a part of the Chinese civil service examination during the Ming (1386-1644) and the Qing (1654-1911) dynasties and used by the Chinese rulers to recruit local officials (Kuang, 1991). This essay had established the main form of academic discourse in ancient China and its great influence still affected the Chinese discourse communities in Taiwan, Hong Kong, Singapore, and particularly in China (Young, 1994).

In his study of the eight-legged essay, Tu (1975) observed that a 八股 *bagu* genre essay normally expounded on a given theme set forth by a question from the Confucian classics. This served as the 題 *ti*, the topic, of the essay, and the ideas expressed by the writer had to conform to it. The essay consisted of five structural parts:

1. 破題 *Po ti* refers to the topic or the theme as indicated by the question—a delicate testing of the writer's understanding and knowledge of the topic, and should be written in only two sentences.
2. 承題 *Cheng ti* elaborates on the theme in four or five sentences and giving the reason why the sage made the statement quoted as the topic;
3. 起讲 *qi jiang, or* opening statement, occurs when the writer is required to speak in the voice of the original sage. Interestingly, at this point, he proceeds to speak not only for the ancient sage but also in his own voice. In some cases,

but not in all, the units would conclude with an additional transitional section called 领题 *ling ti* (taking up the topic), in which the words of the examination-topic are recalled.

4. 入手 *Ru shou,* the body of the essay, consists of four units known as 起股 *qi gu*, the beginning of the exposition of the writer's interpretation of the meaning of the passage; 虚股 *xu gu*, a prelude to the main theme providing a summation of the state of the explanation; 中股 *zhong gu*, the central piece, presenting the fullest exposition of the idea; and 后股 *hou gu*: a further elaboration on the ideas expressed in the 中股 *zhong gu*, tying up the loose ends of the explanation. Each of the 股 *gu* has a pair of "legs"—that is, two rhetorically parallel paragraphs. Four units of eight parallel paragraphs make up of the body of the text. That is why it is called the eight-legged essay. But since 虚股 *xu gu*, the prelude, very often needs not to be in parallel, and 中股 *zhong gu*, the central piece, may have more than two legs, the number of the parallel paragraphs of 八股 *ba gu* prose is not invariably fixed at eight.

5. 大结 *Da jie* is the formal conclusion."
(Tu, 1975, pp. 398-403)

The eight-legged essay, according to Yu (1999), embraced three characteristics: (a) the number of 股 *gu*, or legs, (b) the imitation of Confucian academic tones, and (c) the citation of their words. The purpose of the rhetorical structure was two-fold: to establish a rhetoric such that Confucian ideas were more widely accessible, which in turn facilitated an examination of how well the candidates learned Confucius's works. As a result, just as with any rhetorical structure, as teachers attempt to expand and deepen writers' thinking with a framework, they are constrain composers' thinking within that framework. For the purpose of developing writing capacity regarding logical and literary creation, 八股 *bagu* has been regarded as a cultural accumulation in Chinese writing, indeed a fruit of collective efforts over a historical era, even the optimal summarization

of rhetorical formal principles and the most complex rhetorical structure to externalize the writer's thinking.

The eight-leg essay was reformed twice due to changes in sociopolitical ideologies in China (Kuang, 1991). The first reform took place during the May 4th Movement in 1911, led by a group of western-trained patriotic intellectuals, who rebelled against the Confucian canons of cultural and political ideologies. Expository and persuasive writing started to follow four-part organizational pattern: 起 *qi* (inception)*,* 承 *cheng* (continuation)*,* 转 *zhuan* (transition), *and* 合 *he* (conclusion)*.* The second reform was initiated by Mao Zedong in Mainland China. To comply with Chairman Mao's advocacy, students in Mainland China were taught to organize their writing into three-part organizational patterns, beginning with a generalization, then proceeding to an elaboration, and ending with a speculation (Kuang, 1991).

Snively (1999), in her dissertation, summarized five aspects of Chinese prose writing style: judgmental tone, pithy and brief enunciations, descriptive and syncretistic style, fewer explicit connective devices, and formulaic languages. A flatly judgmental tone was derived from the imitation of authoritative texts and ancient authorities. The pithy style was actually found in classic times in China, when brevity or pithiness was highly valued. Descriptive and syncretistic style was generated by the Chinese tradition that "encouraged students to describe a situation and place it in a theoretical context without offering one's own argument" (Snively, 1999, p. 29). Unlike English, Chinese writing doesn't require explicit connective devices but expects readers to infer the relationship by themselves. Formulaic language refers to quotations, analogies, aphorisms,

metaphors, similes, and rhetorical questions, all of which seem natural in a society that values memorization and the wisdom of the past.

Narrative genre has also been studied recently. Lee (2003) compared English narrative structures of 40 native English and 40 Chinese nonnative English writers in Hong Kong. Both groups were adults who are in their first or second year of undergraduate study. The results showed that the cultural backgrounds, perceptions of narrative structure and narrative rhetoric of their native languages influenced the narrative writing of native and nonnative English writers. Other genres like Chinese grant proposals and business letters were also studied by using move analysis.[6] English and Chinese were similar in the linear organization in these texts, while some rhetorical differences were also discovered through contrastive analysis (Kong, 1998; Zhu, 1997; Feng, 2008).

Kaplan (2005) indicated that different cultures and languages may use different *rhetorical structures*, i.e., different ways of dealing with evidence. Western scientific and technical discourse communities attach great importance to evidence and the arrangement of evidence in lab reports, working papers, reviews, grant proposals, technical reports, conference papers, journal articles, and so forth, while in China, for a long period of history, natural science as an imported subject was considered trivial and tricky. The preference "for multitudinous specifics…is at odds with a Chinese literary tradition that prefers a densely selective and suggestive…style" (Li, 1996, p. 120).

In U.S. culture, facts are regarded as evidence to support the claim, but in other cultures, evidence can be other things, such as authoritative claims or religious maxims.

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[6] Move analysis is the rhetorical analysis of text units that occur in topical sequences.

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In academic papers, evidence comes from data, previous research and theorized generalizations from previous research, which has been called theories. For students' argumentative compositions, grounds can be used instead of evidence. They can be factual, emotional, ethical, and logical. Personal experiences can also be perceived as evidence (Ruszkiewicz & Lunsford, 2004). As it is stated, in English, "the semantic history of evidence is a good illustration of the more general trend 'from certainty to doubt' and from 'truth' to 'matters of fact,' 'experience,' and sense-related 'empirical' knowledge" (Wierzbicka, 2010, p. 146). However, in eastern cultural conventions, evidence in arguments was usually reduced to citation of such authoritative sources as religious or philosophical texts or the writings of famous historical figures (Kaplan, 2001; Li, 1996).

Contrasting eastern and western rhetorical structures can also be approached from the perspectives of truth-seeking or problem-solving research and logic: the hypothesis testing, and Hegel's idealistic dialectic of thesis, anti-thesis, and synthesis (Nisbett, 2003). These are the typical rhetorical structures westerners have been adopted in their oral or written communications to expose decontextualized truth, meaning the truth is generally true regardless of contexts. The problem is approached by testing the truthfulness of an assumption and its contradictory assumption, often ultimately supporting the positive assumption under certain conditions. For example, two hypotheses are given: "men can fly" and "men can't fly." Thus, "men can fly" must be supported under the condition of "taking a plane." What about the Chinese rhetorical structures mentioned above such as 起 *qi* (inception)*,* 承 *cheng* (continuation)*,* 转 *zhuan* (transition), *and* 合 *he* (conclusion)

or eight-legged essays? These patterns do not contradict but try to find middle ground between two contradictory assumptions—for example, "honesty is good" and "honesty is not good." Instead of taking positions, Chinese rhetorical structures will approach this contradiction by contextualizing them.

Here, Nisbett (2003) finds two different types of assumptions. The first, the western example—"men can fly"—is an assumption about objects in real life, which tend to be the concentration of western thought processes. The second, the eastern example, is about human relationship, which is stated to be of interest for thought processes considering that easterners have been identified to regard the world as a system of different relationships. In this sense, Nisbett suggests that when dealing with the truth about the objective world or objects, western rhetorical structures are appropriate since it helps to expose more decontextualized truths about the world, while as far as human relationship is concerned, the eastern rhetorical structures are better for the compromise. As I have elucidated above, the rhetorical conventions were closely related with scientific research, aimed at exposing decontextualized truth. When at the initial period of scientific research, the world was almost unknown to human beings, so the research pattern or the rhetorical pattern could be restrained to some very straightforward and direct or linear mode in order to get this substantial cause initiated. Aristotle's syllogism and Hegel's dialectic idealism were the initial scientific rhetorical preferences. As the knowledge concerning the nature of the world was accumulated, the linear scientific rhetorical patterns were developed into more complex ones in order to garner more complicated knowledge. At this moment, the most complicated scientific rhetorical pattern guiding

scientific research at present, as far as my knowledge is concerned, has been proposed by Nisbett (2003). The pattern is composed of 9 sections:

i.   An overview of the ideas to be considered

ii.   A description of the relevant basic theories

iii.   A specific hypothesis

iv.   A statement of the methods and justification of them

v.   A presentation of the evidence produced by the methods

vi.   An argument as to why the evidence supports the hypothesis

vii.   A refutation of possible counterarguments

viii. A reference back to the basic theory

ix.   A comment on the larger territory of which the article is a part.

(Nisbett, 2003, p. 74)

It is true that as Nisbett (2003) stated: "the whole rhetoric of argumentation that is second nature to westerners is largely absent in Asia" (p. 73).

English/Chinese Writing Interlanguage

In terms of writing, there are some distinctive linguistic differences between English and Chinese. Lin (1999) summarized these differences in the important areas of writing interlanguage on the basis of Taborek and Adamowski's studies in 1984. Table 7 is edited from Lin's summarization.

Classroom Culture: Comparing China and the U.S.

In Chinese tradition, teachers were always very old people with more experiences and expertise. They were respected as authority, and the respect for teachers had been moralized, and regarded as a virtue. Nowadays, the far-reaching impact of this tradition leaves teachers expecting to be authoritative and students respecting teachers out of a sense of morality (Snively, 1999).

Texts in Chinese classrooms are regarded as models to follow since they are the incarnation of those ancient rules in Chinese writing, carrying great authority in the classroom. In order to internalize these models, students are asked to memorize the text recognized as good models of Chinese writing. Since memorization entails attention to the details of the text and good comprehension of the text, Chinese students are asked to analyze the organization of the text and grammatically analyze every sentence and phrase all through middle schooling (grade 7 to 12) (Snively, 1999).

	English	Chinese
VERB	**Tense, person, number** He sings a song today. He sang a song yesterday. He will sing a song tomorrow.	**Non-inflection; use time word** He today sing song. He yesterday sing song. He tomorrow sing song.
NOUN	**Inflection** I have a chair. I have two books. I have many pens.	**Non-inflection; number and many** I have one chair. I have two book. I have many pen.
VERB TO BE	**Copula in the sentence** He is fine.	**Non-copula** He fine.
INFINITIVE	**Based on the verb form** She likes to sing.	**Non-existent** She like sing song.
NOUN, ADJ. ADV.	**Suffixes** Her happiness is well-known. She is happy. She lives happily.	**Non-suffixes** Her happiness well-known. She happy. She live happy.

ARTICLE	"a/an" and "the"	Non-existent
	I have a book.	I have one book.
	Give me the book.	Give I book.
PREPOSITION	"in" "on" "at" and "to"	Non-equivalent word
	See you at three o'clock.	Three o'clock see.
	The book in the drawer.	Book box inside.
	The cup on the table.	Cup table top.
	You go to China.	You go China
PRONOUNS	Subject and object pronoun	Non-difference
	She gave the book to him.	She give he book.
CORRELATIVE CONJUNCTIONS	Although/but, because/therefore are not used together	Used together
		Although he is rich, but he is not happy.
	Although he is rich, he is not happy.	Because he is smart, therefore, I like he.
	Because he is smart, I like him.	
SENTENCE STRUCTURE	Subject- prominent	Topic-prominent
	The teachers in this school are very good.	This school teacher very good.
PASSIVE VOICE	Be + past participle	Prepositions passive meaning
		Book *bei* (no English equivalent) take
	The book was taken away.	away.
Chinese words vary according to tonal morphemes, so students have trouble hearing boundaries of English multisyllabic words. This problem is carried over into speaking and writing.		

Table 7. English-Chinese Interlanguage. (Source: Lin, 1999, p. 42)

Li (1996) described how she was taught to write in China:

I always loved writing. I still remember the "appreciation classes," during which the teacher read aloud to the class a number of the best student papers from the last assignment and analyzed the accomplishments of each selected piece. It was a practice that almost all my Chinese teachers used, and it is still used in most writing classes in China. (Li, 1996, p. xi)

She also mentioned teachers' feedback and how instructive it was for her writing:

Although I often had more or less the same comments---"Well-structured, fluent and expressive use of language…" --- I cherished the red lines scribbled on my paper, for the teacher was talking to me about my writing, alone." (Li, 1996, p. xi)

As for writing instructions, she wrote:

In the reading class, we were expected to understand the content as well as the structure and language of the essays and stories in the textbooks, which were held up as models of good writing. The teacher tirelessly analyzed the content and the formal aspects of each model text. We were told that without the form, the content would have no body, and without the content, the form would have no soul. The favorite story told by one teacher was how a noted poet spent days contemplating whether "push the door" or "knock the door" would best convey the mood of the monk who went to visit his friend under the moonlight." …Through all these direct and indirect instructions, Chinese teachers instilled in me a clear sense of what good writing should be.

In the United States, a pedagogy that encourages the development of individualism in students while lessening the authority of teachers is prevalent in many composition classes in L1 instruction (Trimbur, 1989). An anti-authoritarian ideology is advocated in L1 composition teaching. Students are encouraged to take charge of their own lives and see themselves in reference to their audience and social context. In addition, their personal growth and integration are emphasized by this self-evaluation, social constructionist theory (Berlin, 1988).

These contrastive instructional guidelines cause Chinese students to feel dislocated and aimless when they are dealing with English writing assignments in the U.S. Li (1996) described her English writing experiences in a U.S. university:

In my American classes I soon found myself struggling aimlessly. The problem was not with grades… with grammar or the lexicon… It was comments beyond the sentence level in my writing that left me in endless speculation. The instructions were usually kind and encouraging, telling me that I should write "just what you think," and write in my "honest voice." But other comments indicated that to write just what I think and in the way that I felt most comfortable were not good enough. My writing was sometimes "too vague," other times "lack specifics," and still others "redundant," how to avoid "beating around the bush" and to be subtle and suggestive, and more important, what was worth writing. The last was a non-issue in China, since the teachers always assigned the topic. In America I was told to write "whatever you want," yet somehow I knew

some topics were more worthy topics than others, but I had no idea what
they were. (pp. xi-xii)

Comparing Li's writing experiences in China and in the U.S., one may find that
Chinese students are used to being given the explicit instructions of good writing
(Li, 1996; Matalene, 1985; Shen, 1989; Snively, 1999). When they are confronted with
U.S. writing pedagogy, they are left aimless. Later, Li's reflection indicated that there
were rules in the writing of both cultures. The difference was the standards were
displayed in China but hidden in the U.S.

As for argumentation instruction per se, China often adopts a direct approach in
the Chinese writing classroom. The rationale for direct instruction is to set up the
framework, provide examples or writing samples, and analyze them according to the
conceptual framework. Students are asked to read more examples and practice writing
different topics by imitating or learn from the conceptual frameworks in the models.

Argumentation instruction in U.S. higher education regards argumentation as a
process of using data or evidence to support claims by logically linking data and claims
with warrants or principles (Carr, 1999; Toulmin, 1958). Argumentation is one of the
important intellectual abilities to formulate ideas and beliefs, make judgments and solve
problems (Kuhn, 1991). Argumentation involves identifying various alternative
perspectives and selecting a preferred, reasonable conjecture, hypothesis or proposition,
and then supporting it with data or evidence by a certain methodology (Voss, Lawrence
& Engle, 1991). Argumentation is also the process of achieving agreement on diagnosing
problems, manifesting the ability to justify different positions (Oh & Jonassen, 2006).

Argumentation, also known as justification, copes with reasoning to construct, refute, and compare arguments (Andriessen *et al.*, 2003).

Argumentation provides some conceptual frameworks for students to follow in their collaborative or individual work. These frameworks facilitate learners to explore their thinking potentials and the world around them, and then associate the subjective world with the outside world to achieve epistemological objectives or to improve their skills of problem solving. Baker (1999) stated that argumentation had the potential for arousing students' interests in learning, modifying profound perceptions about problems and phenomena, and refuting misconceptions. Nussbaum and Sinatra (2002) believe that argumentation has potential for intervening conceptualization change because by argumentation, students are engaged in the higher order of thinking activities. Argumentation may arouse conflicts in students' discussion that drive them to have further discussion, comparing and contrasting their conceptualizations with others so as to make selections among the choices (Suthers, 2003).

By exploring research literature, I found that argumentation has been regarded as the way to improve students' problem solving skills in U.S. higher education, which has been constantly researched upon and substantially discussed in the literature concerning students' skills in solving problems in difference disciplines, such as law education, science, engineering, economics, education, and so forth.

There are two approaches to teaching argumentation skills: direct instruction and indirect instruction. Direct instruction hasn't shown positive results as expected. Some research found direct instruction effective in enhancing argumentation skills (Sanders *et al.* 1994), while other research indicated few positive effects for direct instruction on

improving argumentation skills (Knudson, 1991). A great deal of research has contributed detailed findings with respect to the effectiveness of indirect instruction on argumentation by conducting some collaborative tasks and/or by technological support (Oh & Jonassen, 2006). Indirect instruction made used of scaffolds along with some cognitive tools in fascinating students' collaborative problem solving. Scaffolds refer to the conceptual frameworks that constrain students' problem solving processes within certain expected tracks. One of the major scaffolding frameworks is constructed by applying Toulmin's Model. It is constructed by associating claims, evidence, warrants, illustrated as (a) hypothesis, (b) data, (c) principles, and (d) unspecified; and three links: (a) *for*, (b) *against*, and (c) *and* (Suthers, 1998). Students were asked to use this framework in their collaborative discussion about solving problems. Research found that with this approach, students can generate efficiently coherent and more extensive arguments. In other words, students' skills in producing more cogent arguments and solving problems of different types can be honed. What's more encouraging is that the skills can be transferred to individual problem solving skills (Cho & Jonassen, 2002).

Chinese Students' Academic English Writing in U.S. Universities

Studies of Chinese graduate students' academic English writing in U.S. academic institutes abound in research literature. In order to garner strategies and concepts concerning Chinese students' academic English writing to lay both theoretical and conceptual foundations for the study to unfold itself, literature as such is going to be reviewed in this section.

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Researchers on such a topic have attempted to approach this topic with strategies in terms of writing instructional models (Snively, 1999), understanding Chinese instructional and rhetorical conventions (Li, 1992; Snively, 1999), writing assessment (Cooper, 1999), psychological inquiry into writing process (Hu, 2000), and cultural identity shift (Shen, 1989). All these strategies are good for writing instructions within disciplines as well as across disciplines, since these strategies pertain to how to teach writing, how to assess writing, what the writing process is like, what impacts from native culture are identified, and what changes have occurred to the writers' self-perception, as far as Chinese ESL graduate students are concerned in the activities of academic English writing.

With these strategies, some theoretical concepts are associated. When it comes to elaborating on writing instructional models, culturally responsive education, guided by critical theory and enriched by Paul Freire's (1970) critical pedagogy, is often adopted to stress the importance of taking into consideration students' individual and cultural differences when a culturally responsive instructional model is designed, adjusted, and modified for a specific cultural group. In this respect, Helen Snively's (1999) dissertation, which was based on a 4-year longitudinal study and her 12 years of experiences as a writing instructor, provided some valuable suggestions on how to adjust writing instructional models for Chinese graduate students. She emphasized the importance of models and practice to internalize the models in writing instruction. She also mentioned Chinese face-saving to explain Chinese students' silence in the classroom, and Chinese style of human relationship to explain Chinese students' respect for instructors and

professors.

Understanding Chinese instructional and rhetorical conventions is closely related to contrastive rhetoric derived from the theory of language relativity. With more than 40 years of research history, contrastive rhetoric has been an active field from which many concepts concerning Chinese students' academic English writing have evolved. Just as Kaplan (2001) identified five distinct rhetorical patterns—namely, English, Semitic, Oriental, Romance, and Russian—further studies (e.g., Kaplan, 1968; Lin 1999) found the differences in English and Chinese schemata. English rhetorical convention observes a linear thinking pattern while Chinese people follow a non-linear pattern in organizing their thoughts in Chinese writing, which appears to be like peeling the onion, layer by layer.

By exploring two rhetorical conventions in these two cultures, scholars found more specific and fascinating discrepancies. Shen (1989) observed contrasts between Chinese pictorial logic and western verbal logic. Shen wrote that Chinese pictorial logic refers to the thinking process conducted largely in pictures and then transcribed into words. In English writing, however, logic is conceptualized by the arrangement of propositions and managing the systems of cohesion and coherence. To some extent, this conceptualization is culturally defined (Kaplan, 1988). In the United States, two traditions are reflected in the writing education: one is syllogistic and the other is hierarchical (Wilkerson, 1986). Great value is placed on clarity and precision in the framework of a rigorously logical system (Kaplan, 1988).

Cultural schemata refer to the ideological modes well-established in a cultural convention. People's thinking in that culture is to some extent prescribed by the

ideological background knowledge. China's 5000-year history accumulated a number of such ideological modes that have impacts upon Chinese people's thinking and rhetoric, such as collectivism, interpersonal harmony, and compliance with authority (Lin, 1999). Such rhetorical features as genre, rhetorical structure and reader versus writer responsibility were examined in order to identify the conventional differences that result in confusions and difficulties for Chinese students to deal with academic English writing.

Expository and persuasive writing has gained much attention due to the fact that there has been long history of well-established conventions to write expositions in Chinese. The evolution of the rhetorical pattern was initiated by eight-legged essays. Then, the eight-legged essay was reformed twice due to changes in sociopolitical ideologies in China (Kuang, 1991). The May 4th Movement of 1911 (mentioned previously on page 65) changed approaches to expository and persuasive writing, following instead a four-part organizational pattern: inception, continuation, transition and conclusion. Later, to comply with Mao's advocacy, students in Mainland China were taught to organize their writing into three-part organizational pattern, beginning with a generalization, then proceeding to an elaboration, and ending with a speculation (Kuang, 1991). Such an evolution can be illustrated by the following chart:

Mao's Advocacy: **Three-part Organizational Pattern**		
Generalization	Elaboration	Speculation

May 4th Movement: **Four-part Organization Pattern**			
Inception	Continuation	Transition	Conclusion

Before May 4th Movement: **Eight-legged essays**							
Identifying the theme	Elaborating on the theme	Opening statement	Taking up the topic	Front leg	Middle leg	Back leg	Conclusion
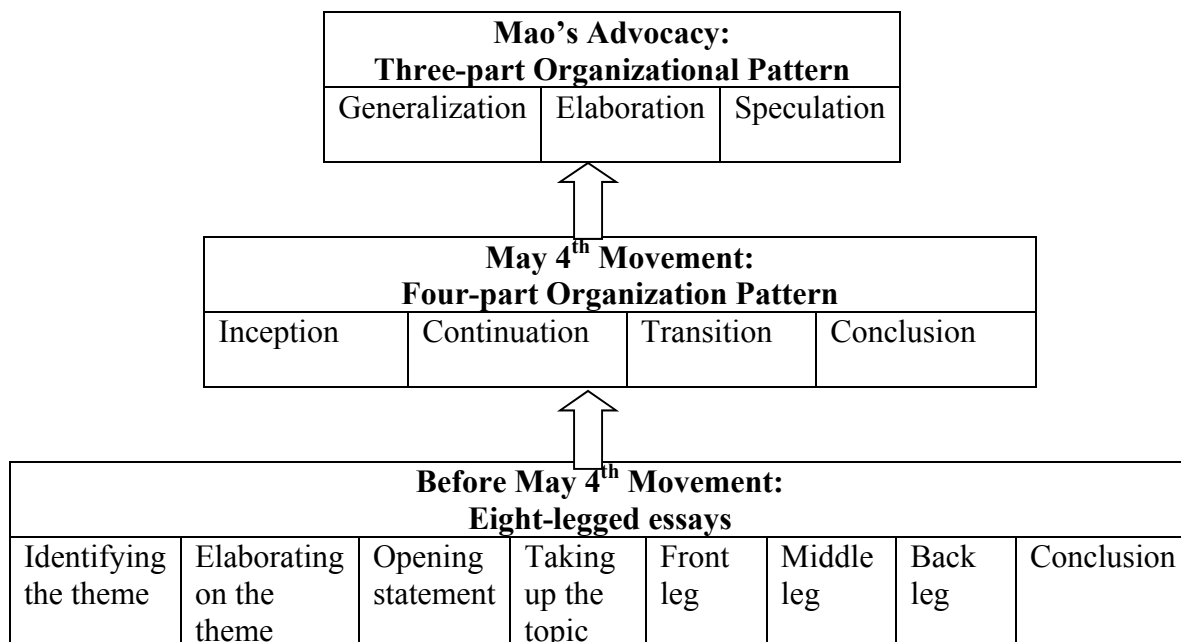
Figure 7. **Rhetorical reforms in China.**

Kaplan (2005) indicated that different cultures and languages may use different rhetorical structures, i.e. different ways of dealing with evidence. Western scientific and technical discourse communities attach great importance to evidence and the arrangements of evidence in lab reports, working papers, reviews, grant proposals, technical reports, conference papers, journal articles, and so forth; in China, for a long period of history, natural science, as an imported subject, was considered trivial and tricky. The preference "for multitudinous specifics… is at odds with a Chinese literary tradition that prefers a densely selective and suggestive…style" (Li, 1996, p. 120).

Rhetorical structures have been developed in both Chinese- and English-based cultures. Chinese rhetorical evolution has been characterized by changes in patterns of the authorized writing organization whereas the English-based systems have focused on

structures of propositions in arguments. The following table demonstrates diachronic contrasts of rhetorical structures in Chinese and English rhetorical conventions.

The Chinese		The English	
Duration	*The Recognized Rhetorical Structures*	*Duration*	*The Recognized Rhetorical Structures*
Before May 4th	The Eight-legged Essays	Before the 19th Century	Aristotelian Syllogism
During May 4th	The Four - Part Organization Pattern	During the 19th Century	Hegelian Dialectics
After May 4th	The Three-Part Organization Pattern	After the 19th Century	Toulmin's Model

Table 8. The Diacronic Contrast of Rhetorical Structures in Chinese and English.

From the Table 8 above, we can infer the directions of the two rhetorical structures: the Chinese patterns leading to reductionism in order to keep up with the life tempo when science and technology were introduced and replacing agriculture in China; English rhetorical structures, on the other hand, leading to the complexity of scientific research, empowered by psychological studies. From this historical perspective, we once again confirmed that this scientific rhetorical structure had been absent in Chinese culture while it was blooming in the West.

The concept of reader versus writer responsibility attracted much attention from rhetorical experts. It reminded both the readers and the writers of the social function of

academic writing, i.e., to discover meaningful thoughts, transcribe them into words, and communicate them to the audience. In English, that writers should assume the responsibility to make them understood by the audience was stipulated, while in Chinese, writers, especially ancient writers, often got deeply indulged into pursuit of artistic taste so as to leave audience in confusion or despair to understand the writers' delicacies and intricacies. (Please see Appendix D and Appendix E for examples.)[7]

Besides rhetorical features, composition instructions in China and the U.S. were also examined to find effective English writing instructions for Chinese students in the U.S. As some Chinese scholars and students remembered (namely Shen, 1989; Li, 1992; and Snively, 1999), when they first came to U.S. universities, they themselves were confused by the criteria of good writing since the professors usually didn't explicitly tell the students what they were expected to do; instead, they just gave some guidance such as "writing in your own voice" or "expressing your own individual thoughts." On the contrary, in Chinese L1 composition class, teacher and text authority was stressed. Explicit criteria and writing examples or models were provided for students to follow. Therefore, in order to provide culturally responsive instruction to Chinese students, at least some transitional instructional techniques should be considered to help Chinese students adjust into U.S. academic discourse communities and obtain their own voices. Snively wrote of such techniques, including adjustments in explicit instruction, feedback,

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[7] The delicacies and intricacies can be illustrated by the rhetorical conventions adopted in Chinese ancient poems and eight legged essays. Please refer to Appendix D for an example of eight legged essays and Appendix E for example of Chinese ancient poems with brief rhetorical illustration.

models, and—perhaps most importantly—practice to internalize the models and interactive learning, such as conferencing and peer response groups.

Writing assessment calls for considering students' ideological and cultural backgrounds in recent years since writing was regarded as a social activity which would unavoidably be influenced or defined by the social ideology and culture, according to social constructionism. Knowledge of the students' cultural conventions has been identified as a prerequisite to understanding and then assessing students' writing (Cooper, 1999). Each student represents and presents one perspective in approaching the same topic. Different perspectives constitute a holistic comprehension of an issue. Guarantee of diversified voices involved respect for culturally diversified writing: Additive instead of subtractive, appreciation instead of alienation. Such have been touted as the right attitudes towards writing assessment in cross-cultural context (Cooper, 1999).

The 1970s and 1980s saw the focus shift of writing research and pedagogy from the products of writing to the process of writing (Ivanic, 1997), which stressed the significance of approaching writing from the psychological perspective (Connor, 1996). The writing process may vary from individual to individual due to different learning styles, personalities, and prior knowledge. Besides, cultural background was claimed to be an important factor influencing the adoption of different writing process by students from different cultures (Connor, 1996). In the Chinese context, as far as the Chinese graduate students are concerned, they may have little experience of learning writing by paying attention to the writing process, which was obviously not a common practice in Chinese L1 writing instructions. By the same token, the variations in their writing process

may be much greater and worthwhile to be investigated so that suggestions can be figured out to help them overcome challenges of academic English writing.

Identity construction by the academic discourse has been discussed by Ivanic (1997). She based her discussion upon the social constructionist paradigm and Goffman's (1967) social-interactionist theory of self-representation; that is, identity is socially constructed. When students enter higher education, if they sense an identity crisis, it is not due to the inadequacy in themselves but the mismatch between their own entities (reality, knowledge, thought, facts, texts, and selves) and those of the academic discourse community. If they expect to join that community, they have to take on its values and practices and become a member of that community. Power made them struggle among different identity choices. Ivanic claimed that mature students may acquire multiple identities, and juggling them in their writing even though those multiple identities are sometimes conflicting to each other (Ivanic, 1997).

Goffman's social-interactionist theory of self-representation enriched the social constructionist paradigm by suggesting a dramaturgical metaphor; that is, people's behaviors may be consciously or unconsciously influenced by what is put on the stage, and yet what is on the stage actually is manipulated by the "backstage." Therefore, apparent meaning is conveyed by performance, but in fact the performance is prearranged by power (Ivanic, 1997).

Shen (1989) recognized language-based distinctions of such staging in his own Chinese and English writing, particularly his own English composition experiences in U.S. universities. Shen found that he was redefining himself when he was urged to write just what he thought and to be himself in English composition and literature classes. By

such a redefinition, the way he envisioned himself changed, as did the way he perceived the world. In other words, he suggested, while writing English, that his Chinese self had to be substituted for another self equipped with the values of individualism.

Aside from cultural, ideological, and conventional discrepancies, writing interlanguage has also been studied to have a better understanding of the errors made by Chinese students in their academic English writing. This linguistic concern cannot be ignored due to the fact that English and Chinese are two different languages, one being alphabetic and the other logographic. Chinese verbs may not be inflected, unlike English verbs, which are inflected to indicate numbers, genders, tenses, and moods. As a result, Chinese students have great difficulties in distinguishing the usages of different tenses and moods. Understandably, there are numerous slips when Chinese students attempt singular verbal forms and gender consistency. Prepositions cause as many difficulties as verbal forms since there are fewer prepositions in Chinese. These differences make learning English fascinating for Chinese students, but they also incur unimaginable hardship and awkwardness to Chinese students.[8]

To sum up, studies investigating Chinese students' academic English writing have been conducted since the mid-1960s, among which some focused on Chinese graduate-level students' academic writing to meet the needs of an increasing number of Chinese graduate students in North American institutions to pursue their Master's or PhD degrees. At the turn of 21st century, such studies bloomed and research findings were found of great help to Chinese graduate students. Researchers attempted to adjust instructional techniques to the convenience of Chinese students after Chinese instructional and

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[8] These differences may also make it fascinating for English speakers to learn Chinese.

rhetorical conventions were studied. The rhetorical research of Chinese writing also helped assess Chinese students' English writing, which may be impacted by Chinese language and culture. A psychological approach to English writing research about the writing process and a cultural identity shift as well as comparative linguistic studies added perspectives to this field. Emerging are comprehensive horizons of inquiries into Chinese graduate students' as well as L2 graduate students' academic English writing in North American institutions.

Coherence in Cross-cultural Contexts

Coherence has been studied separately from cohesion in previous studies (Connor, 1984; Connor, 1990; Connor, 1991), but according to Carroll (1999, 2007), Enkvist (1990), and Lee (2002), cohesion is the explicit form of coherence in a discourse, and it indicates how a discourse is formally coherent by means of lexical and grammatical devices. Therefore, in order to examine coherence in students' English compositions, cohesion should be integrated in the model as part of the mechanism to look at such a textual phenomenon in students' compositions. Features of cohesive devices in Chinese undergraduate students' compositions have been studied (Liu & Braine, 2005; Zhang, 2000), though not in a comparative research context. In order to find the differences involved in cohesive features in Chinese students' and native English speakers' compositions so as to teach cohesion accordingly, a comparative study of such is necessary.

Topical structure analysis has been applied in composition studies of ESL students and EFL students in Europe, as well as L1 students, and it has been recognized as a strong predictor of writing quality for compositions of English as L1 and L2. It was also considered to be one of the best methods to teach students to write coherently. However, until now, it has not been used in comparative studies of U.S. and Mainland Chinese undergraduates' compositions. As far as study of coherence in compositions is concerned, topical structure analysis should be an indispensable part of the model in view of its pedagogical implications.

Toulmin's model enjoyed the same credibility in teaching and assessing students' compositions. Though the model has been used to study argumentative writing of U.S. and Japanese students (Oi, 1999) and of Chinese students in Taiwan and U.S. students (Cheng, 2010; Eason, 1995), it hasn't been used to assess compositions written by Mainland Chinese undergraduates and U.S. students, considering that these they may be exposed to different writing instruction in classrooms.

Argumentative rhetorical structures have been examined in previous studies (Cheng, 2010; Eason, 1995; Oi, 1999), but the assignment factor was not given enough consideration so that some limitations existed in the studies. If the assignments were not closely related to students' life or experiences, students may not be able to make better use of critical thinking in their writing (Bloch, 2004). Aside from the assignment factor, culture should also be considered since if a writing assignment belongs to western culture, a Chinese student might find it difficult to accommodate.

Studies of Discourse Coherence in Chinese Context

There has been a paucity of discourse studies in China. Van Dijk, the main editor of *Text,* revealed that most of the manuscripts for the journal were from the U.S.,Western Europe ranked second, and Australia, Japan, and Israel followed. Obviously, there weren't any articles from the third world, which means that discourse study in China has been lagging behind. Chinese discourse scholars failed to communicate adequate with the international community (Hu, 1995). As for coherent patterns in argumentative essays in Chinese, Hu (1995) mentioned the Chinese eight-legged essay structure, but he thought that the structure might confine writers' thinking and impair creativity in the writing. Other literature illustrated some possible organizations of an argumentative essay, which were far too simple to be called discourse analysis (Hu, 1995).

In 2003, I published an experimental study of teaching coherence of English composition to college students in China, based upon Carroll's (1999) notion of coherence, but the problem lay on the global level. I couldn't find a more reliable way to look at coherence on the global level. Now, with topical structure analysis and Toulmin's model, I may be able to solve such a problem.

Summary

By reviewing previous studies on coherence of ESL/EFL students' compositions, I found that the facet of cohesion has been examined the most and applicable pedagogical suggestions have been made, but still no consensus has been achieved. More studies are needed to generate more definite knowledge concerning coherence for ESL/EFL educators to refer to. The other two facets of interpretability and justifiability were even more indefinite. Studies in these two facets could only contribute some tentative understandings of the construct of coherence. No down-to-earth definite advice has been suggested to ESL/EFL educators like me, who were still left puzzled about how to teach the other two facets of interpretability and justifiability to students. Obviously, topical structure analysis and Toulmin's model are two strategies in ESL/EFL writing instruction. Personally, I tried these two strategies and I found that they equipped me with the logical lens to work out logical imperfections in student English compositions. What is more encouraging is that I can deliver these strategies to students, and ask them to do self-revision and peer review.

While embedding the three facets in English writing instruction, we may need to understand why it is difficult for some students to acquire the three strategies in their English writing. Is it relevant to their native language, culture and rhetorical conventions as suggested by previous studies in the context of contrastive rhetoric? Answers to these questions are expected to provide insights into ESL/EFL students' English writing in terms of coherence.

Chapter IV

Research Design and Methods

Coherence has been an important issue in both Chinese and English writing. It represents the writers' thinking patterns in writing. The study examined the coherence in the argumentative essays written by Chinese college EFL students in China and English speaking college students in the U.S., in order to determine whether there is difference in this respect in the two cultural contexts. My research questions were as follows:

1. Is coherence in Mainland Chinese EFL students' argumentative compositions different from that of English speaking U.S. students' compositions with reference to the conceptual model of argumentative coherence? If so, how?

   a. What differences can be found in terms of frequencies of different cohesive devices used in the argumentative essays by the two groups of students?

   b. What differences can be found pertaining to the frequencies of three types of sentential progression and T-units in the argumentative essays by the two groups of students?

   c. What differences can be found with reference to the means of scores on three indices of claim, data and warrant in the argumentative essays by the two groups of students?

2. What cultural, rhetorical, and linguistic factors are identified to be associated with the coherence differences in Mainland Chinese EFL and U.S. English speaking college students' argumentative compositions?

3. How are the linguistic, rhetorical and cultural factors interrelated with one another?

The study utilized text analysis to look at the differences in the coherence of Chinese and U.S. undergraduate students' English compositions, and then with reference to previous empirical studies and theories to analyze the cultural, rhetorical and linguistic factors associated with the results of the analysis to ascertain whether advanced Chinese EFL students exhibit different thinking patterns in their compositions than their U.S. English speaking peers. The following sections illustrate the research design, participants and settings, methods of data collection, data analysis and data interpretation.

Research Design

Precursor Studies

Studying Chinese students' academic writing in the research context of intercultural rhetoric has, in the past, made use of text analysis and interviews to conduct the inquiry. My research design was based upon three major studies of comparing rhetorical strategies between argumentative/expository essays of U.S. and Chinese college students in Mainland China—Yang and Cahill, 2008 and Liu, 2007—and Taiwan—Chien, 2007. All three studies tested the hypothesis of contrastive rhetoric that L1 cultural and rhetorical conventions influenced students' L2 writing, and in this case,

Chinese cultural and rhetorical conventions influenced Chinese students' English argumentative writing.

Yang and Cahill (2008) studied a linearity and circularity dichotomy in Chinese and English contrastive rhetoric by examining the placement of thesis statements in the compositions and topic sentences in each of the paragraphs. No significant difference was found between U.S. and Mainland Chinese students' rhetorical organization of expository essays. Directness/linearity was also characteristic of Chinese students' compositions. The research contributed such findings to Chinese rhetorical conventions which were to some extent as direct as English rhetoric. Liu's (2007) study of the placement of thesis statements in English argumentative writings by U.S. and Mainland Chinese students also found no difference in the placement of thesis statements by U.S. and Mainland Chinese students. Text analysis was applied in these two studies, but no interviews were utilized to examine students' mental work while writing the composition for the study.

Chien's (2007) study made use of both text analysis and interviews to investigate whether Chinese rhetorical conventions influenced Chinese college students' expository writing. The findings of the interviews revealed that teachers' writing instructions may be a crucial factor to influence Chinese students' rhetorical choices in their English compositions.

Research Design of This Study

Although this study design is based upon the three precursory studies, this study utilized a different lens: examining argumentative coherence in U.S. and Mainland Chinese college students' compositions by means of a model of coherence embedded in a conceptual model of intercultural writing as formulated in Chapter II. Figure 8 associates research questions with the conceptual model.
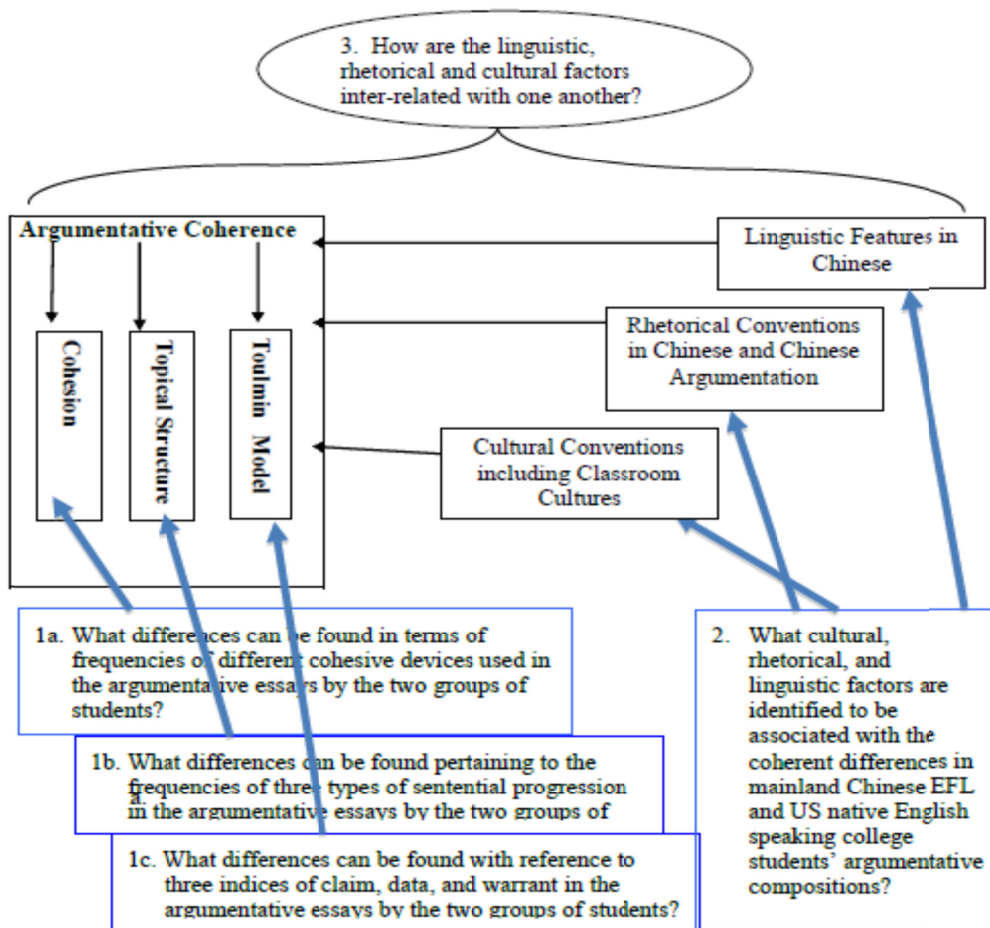
Figure 8. How the conceptual model of intercultural writing corresponds to the research questions.

Research Question 1 and its three sub-questions were intended to examine the difference in coherence manifested in U.S. and Mainland Chinese college students' argumentations. Research question 2 was aimed at investigating linguistic, rhetorical, and cultural factors associated with the results I found in Research Question 1. Table 7 shows the links between research questions and research methods.

As illustrated in Figure 8, the research questions were developed from a conceptual model which was formulated by integrating the coherence theory in text linguistics and the theoretical framework of contrastive and intercultural rhetoric. To examine these research questions, the mixed methods study was designed. Textual and interview data were the raw data. Textual data were analyzed both quantitatively and qualitatively. With quantitative data analysis, differences between two groups across 16 variables were determined. Complementary to this quantitative section, a qualitative section was designed to probe the cultural factors associated with second language writing. Therefore, on the whole, this was an explanatory mixed methods research design (Fraenkel & Wallen, 2009). Guided by the research procedures of the mixed methods design, the study was aimed at assessing and modifying the initial conceptual model.

Research question concepts	Research sub-questions	Research methods
1. Argumentative coherence	frequencies of cohesive devices	Frequency count by two groups of three raters regarding reference, substitution, ellipsis, conjunction, lexical devices, + Hotelling (multivariate) t-test of two independent sample means
	frequencies of topical structures	Frequency count by two groups of three raters regarding T-units, parallel progression, sequential progression, and extended parallel progression topical structures + Hotelling (multivariate) t-test of two independent sample means
	holistic evaluation of Toulmin's model	Frequency count by two groups of three raters regarding claim, data, and warrant via Connor's (1990) rubric + Hotelling (multivariate) t-test of two independent sample means
2. Cultural analysis	rhetorical	Open coding, axial coding, and constant comparative analysis of interviews, surveys, and memos with respect to interview questions 1-4
	cultural	Open coding, axial coding, and constant comparative analysis of interviews, surveys, and memos with respect to interview questions 5-7
	linguistic	Open coding, axial coding, and constant comparative analysis of interviews data and memos with respect to interview questions 8-9 (See Appendix G)
3. The interrelation among the three factors		Open coding, axial coding, and constant comparative analysis of memos + Correlational statistical procedures

Table 7. Research Questions and Methods.

Participants and Settings

Thirty compositions by Chinese students were selected from the submissions of an English contest, which asked Chinese college students from a Chinese university located in Beijing to write an argumentative composition of about 300 words (See Appendix F). These 30 students' compositions were recognized as the top 30 out of the contest submissions (altogether more than 100 submissions) according to the TOEFL writing rubric (See Appendix G). The criterion of advanced English learners in this study is that all students involved in this study should have passed the English exam in Chinese college entrance exams. That's why Chinese college students were selected. College students should have accumulated enough linguistic, lexical, and grammatical knowledge to write an English argumentative essay of about 300 words. Meanwhile, 60 English speaking U.S. undergraduates in a university located in Miami were asked to write a composition on the same title as the writing assignment. The first 30 better qualified compositions were selected based on the same rubric shown in Appendix G.

Among the 30 Chinese and 30 U.S. college students, up to 10 from each group were originally planned to be selected to be interviewed. And yet, during the process of data collection, more Chinese students and fewer U.S. students participated in the interviews as shown in Tables 9 and 10. These subjects, including their corresponding pseudonyms, are found below in Tables 9 and 10. Of the entire U.S. sample, only 10 % of the participants were male; in fact, only one male U.S. college student was found to participate in the interviews. The criterion of selecting interviewees in this study follows the principle of theoretical sampling (Charmaz, 2000; Corbin & Strauss, 2008).

Theoretical sampling refers to the process of sampling sequentially in order to refine

ideas and fill in gaps in the theories developed by the study (Charmaz, 2000). Its purpose

is not to increase the sample size but refine the theories generated by previous sampling

in the study.

	Pseudonyms	Gender	Majors
1	Chenhong	F	Law
2	Chenchun	M	International Law
3	Daizhao	M	International business
4	Heji	M	Civil Law
5	Huangshi	M	Business
6	Lihan	M	International Business
7	Liuqiang	M	Foreign Language
8	LiXiu	F	Journalism and Media
9	Liyao	F	Law
10	Liyu	M	Public administration
11	Qianhao	M	Law
12	Siqi	F	Foreign Language
13	Songguo	M	International Law
14	Wangjing	F	Sociology
15	Wangwen	M	Public Administration
16	Wuhan	M	Foreign Language
17	Wuhui	F	International Law
18	Xiameng	F	Law
19	Xiaokai	M	Civil Law
20	Yangzi	F	Foreign Language
21	Yaorao	M	Business administration
22	Yuhan	M	International Law
23	Yuna	F	Foreign Language
24	Zhongwen	F	Civil Law

Table 9. List of Interviewees (China).

	Pseudonyms	Gender	Majors
1	Kana	F	Pre-elementary education
2	Kim	F	Pre-exceptional student education
3	Jun	M	English Education
4	Rose	F	Arts and Sciences - Philosophy
5	Sana	F	Pre-exceptional student education
6	Sus	F	Elementary education
7	Yese	F	Elementary education

Table 10. List of Interviewees (U.S.).

Methodology for Research Question 1

Methods of Data Collection

Data in this study came from texts, interviews, and memos. Sixty compositions were collected as text data. 24 participants in Chinese group and 7 in the U.S. group who submitted compositions to the study were interviewed. In the process of analyzing text and interview data, I wrote memos. Afterward, I then analyzed these memos to interpret data in this study. Data collection for research question 1 focused on 60 compositions regarded as text data. Thirty Chinese undergraduate EFL students in a Chinese university and 30 English speaking U.S. undergraduates were asked to participate in the study. Each student wrote an argumentative composition entitled "Honesty is the best policy." Subjects were asked to agree or disagree with the statement and justify their position. The composition was to be approximately 300 words long. Subjects were not asked to finish the composition within a limited time or in the classroom. Instead, they were asked to write in a natural situation so that they could fully reflect their language competence.

Methods and Procedures of Data Analysis

I analyzed the data from the compositions in an effort to discover similarities

and differences between Chinese and U.S. college students' essays in terms of three

indices: cohesion, topical structures, and Toulmin's Model. Two other raters—third-year

doctoral students in a TESOL program—were invited to analyze 10 % of the composition

data in order to scale the estimates of inter-rater reliability between the other two raters

and me. They were not trained by me since I was also one of the raters. Instead, they

were given detailed directions to assess the compositions. The analysis was implemented

in three sections, each section focused on one of the three indices identified as good

predictors of students' writing quality. In section 1, all the coherent devices of different

types were counted and differences in the frequencies were calculated. In section 2,

topical structure analysis was used to determine the differences in the frequency of three

types of topical structure in Chinese and U.S. students' compositions. In section 3, the

students' compositions were examined using Toumin's model of logic with reference to

the rubric developed by Connor (1990). In all three sections, Hotelling (multivariate) t-

tests were used to determine the significant differences across 16 dependent variables

between two groups. Hotelling t-test is the multivariate t-test applied when there is more

than one dependent variable to be compared in two different groups.

Section 1: Counting the Frequencies of All Nine Categories of Cohesive

Devices. Carroll (1999, 2007) suggested 9 categories as well as sub-categories of

cohesive devices. The categories are reference (including pronominal, demonstrative and

comparative), substitution, ellipsis, conjunction and lexical (including reiteration,

synonymy and hyponymy: see Table 11 below). The frequencies of these cohesive

devices were counted by three raters to establish credibility. A crosstab was constructed

to conduct factor analysis of the differences between 2 groups across 9 categories and

subcategories. Hotelling (multivariate) t-tests were used to test the following null

hypotheses to determine whether differences existed in the means of the frequencies.

$H_{0a1:}$ There is no difference in terms of frequencies of pronominal reference used
in the argumentative essays by the two groups of students.

$H_{0a2:}$ There is no difference in terms of frequencies of demonstrative reference
used in the argumentative essays by the two groups of students.

$H_{0a3:}$ There is no difference in terms of frequencies of comparative reference used
in the argumentative essays by the two groups of students.

$H_{0a4:}$ There is no difference in terms of frequencies of grammatical devices of
substitution used in the argumentative essays by the two groups of
students.

$H_{0a5:}$ There is no difference in terms of frequencies of grammatical devices of
conjunction used in the argumentative essays by the two groups of
students.

$H_{0a6:}$ There is no difference in terms of frequencies of grammatical devices of
ellipsis used in the argumentative essays by the two groups of students.

$H_{0a7:}$ There is no difference in terms of frequencies of lexical devices of
reiteration used in the argumentative essays by the two groups of students.

$H_{0a8:}$ There is no difference in terms of frequencies of lexical devices of
synonymy used in the argumentative essays by the two groups of students.

$H_{0a9:}$ There is no difference in terms of frequencies of lexical devices of

hyponymy used in the argumentative essays by the two groups of students.

Table 11 shows how data were analyzed in this section.

Categories of Cohesive Devices	Sub-categories of Cohesive Devices	Methods of Data Analysis
reference	pronominal	Counting frequencies of pronominal referential devices in compositions of two groups by three raters
	demonstrative	Counting frequencies of demonstrative referential devices in compositions of two groups by three raters
	comparative	Counting frequencies of comparative referential devices in compositions of two groups by three raters
substitution		Counting frequencies of devices of substitution in compositions of two groups by three raters
ellipsis		Counting frequencies of devices of ellipsis in compositions of two groups by three raters
conjunction		Counting frequencies of devices of conjunction in compositions of two groups by three raters
lexical	reiteration	Counting frequencies of devices of reiteration in compositions of two groups by three raters
	synonymy	Counting frequencies of devices of synonymy in compositions of two groups by three raters
	hyponymy	Counting frequencies of devices of hyponymy in compositions of two groups by three raters

Table 9. Data Analysis of Cohesive Devices.

In order to scale the reliability of the assessment in this section, I invited two other

raters to assess the compositions in terms of cohesion. Directions to the raters were given

as shown in Appendix I, Section 1. Inter-rater reliability for all three raters was .99 for

pronominal reference, .95 for demonstrative reference and .83 for comparative

reference, .84 for conjunction, .88 for reiteration, .84 for synonymy. For substitution,

ellipsis and hyponymy, it is impossible to calculate the value of the coefficient since there

is no variance within data. My ratings had to been used in the quantitative data analysis

since the other raters were asked to rate only 10 % of the data, but their ratings could help to scale the estimates of inter-rater reliability.

Section 2: Topical Structure Analysis. Connor and Farmer (1990) explained how to conduct a topical structure analysis of texts. In this section, I summarized their approach and present how such an analysis of 30 compositions was conducted in the study. As illustrated in Chapter III, there are three possible progressions of sentences: parallel, sequential and extended parallel. Connor and Farmer (1990) briefly but adequately defined three possible progressions by relating them to topics and comments. In parallel progression, the sentence topics are semantically identical. In sequential progression, the comment of the previous sentence becomes the topic of the next sentence. In extended parallel progression, a parallel progression is embedded in a sequential progression. Three principles were suggested to enunciate how to perform a topical structure analysis of a text. They were (a) identification of sentence topics, (b) determining sentence progression, and (c) charting the progress of sentence topics (Connor & Farmer, 1990). In the following part, the three principles were illustrated with examples given by research literature.

Topic is the main idea of the sentence, which often coincides with the sentence's grammatical subject, e.g., *John* exercises every day. The topic, however, is not necessarily the grammatical subject. In most texts, one noun or noun phrase is the topic, located in the beginning, middle or end of the sentence, for example:

- Mathesius attempted to explain *the relationship of individual sentences within the context of extended texts.* (In the middle)

- The Federal Election Commission has a duty to condemn and punish *the illegal fund-raising by President Clinton and Bob Dole* during the 1996 election. (At the end; Hoenisch, 2004).

The other two principles were illustrated together by first identifying the topics and according to the relationships between the sequential topics, determining the type of progressions, and then chart them. In previous studies applying topical structure analysis, the frequencies of each progression within topic units were counted. One of the limitations of doing this was that the length of each unit was not equally defined. Some can be longer and some may be shorter. Therefore, in this study, frequencies of each type of progression were counted across the text. Differences concerning topical structure were identified with methods of data analysis similar to the previous section.

In this study, under this index, in addition to following the above three principles, the total number T-units[9] in the compositions were also counted by three raters. Differences in the means of the frequencies of the T-units in two groups were examined by the methods of Hotelling (multivariate) t-tests of two independent sample means with SPSS 17.0. Hotelling (multivariate) t-tests were driven by the following null hypotheses:

H_{0b1}: There is no difference pertaining to the frequencies of paralleling progression in the argumentative essays by the two groups of students.

H_{0b2}: There is no difference pertaining to the frequencies of sequential progression in the argumentative essays by the two groups of students.

---

[9] The T-unit refers to the minimal terminable unit defined as "a single clause (or independent clause) plus whatever other subordinate clauses or non-clauses are attached to, or embedded within that one main clause" (Hunt, 1965, p.93).

H_{0b3}: There is no difference pertaining to the frequencies of extended paralleling

progression in the argumentative essays by the two groups of students.

H_{0b4}: There is no difference pertaining to the frequencies of T-units in the

argumentative essays by the two groups of students.

Table 12 shows data analysis in this section.

Data Categories	Analysis Methods
T-Units	Counting T-Units in compositions of two groups by three raters
Parallel Progression	Counting frequencies of parallel progression in compositions of two groups by three raters
Sequential Progression	Counting frequencies of sequential progression in compositions of two groups by three raters
Extended Parallel Progression	Counting frequencies of extended parallel progression in compositions of two groups by three raters

Table 10. Data Analysis of Topical Structures.

Directions to the raters were shown in Appendix I, Section 2. With respect to the

topical progression analysis of student essays, I examined the inter-rater reliability. The

following results occurred: .71 for paralleled progression, .72 for sequential progression,

and .72 for extended progression. In addition, the inter-rater reliability for T-Units

was .86.

Section 3: Toulmin's Model. Toulmin's model of claim, data, and warrant were

applied to examine the arguing logic in students' compositions. Connor (1990) explained

the three concepts of claim, data and warrant. Claim was defined as "conclusions whose

merits we are seeking to establish" (Toulmin, 2003, p. 97). To determine the strength of

the claims in the essays, Connor considered whether the claim was relevant to the task, suggested a specific and clear problem, and presented a consistent point of view. Sub-claims were also identified and their development was also examined. Data were interpreted as support for the claim in the form of experience, facts, statistics or occurrences. Both quantitative and qualitative aspects of data were inspected. The quality of the data was considered good if they were based on specific facts or the writers' own experience; they also had to be directly related to the claim so as to make the persuasion effective.

Warrants were regarded as the bridge between data and claim. They were usually rules, principles and inference-license to show that, to start with these data, the step to the original claim or conclusion is an appropriate and legitimate one. In this sense, warrants could also be regarded as general and hypothetical statements which acted as bridges to authorize the steps in the arguments (Toulmin, 1956, 2003). Connor (1990) rated warrants according to their explicitness, soundness (reliability and trustworthiness), and relevance to the case. Based on the illustration, a rubric was developed by Connor (1990) to measure how well the model was utilized in the composition, as presented in Table 13:

_____

<u>Claim</u>
1. No specific problem stated and/or no consistent point of view. May have one sub-claim. No solution offered, or if offered nonfeasible, unoriginal, and inconsistent with claim.
2. Specific, explicitly stated problem. Somewhat consistent point of view. Relevant to the task. Has two or more sub-claims that have been developed. Solution offered with some feasibility with major claim.
3. Specific, explicitly stated problem with consistent point of view. Several well-developed sub-claim, explicitly tied to the major claim. Highly relevant to the task. Solution offered that is feasible, original and consistent with major claim.

<u>Data</u>
1. Minimal use of data. Data of the "everyone knows" type, with little reliance on personal experience or authority. Not directly related to major claim.
2. Some use of data with reliance on personal experience or authority. Some variety in use of data. Data generally related to major claim.
3. Extensive use of specific, well-developed data of a variety of types. Data explicitly connected to major claim.

<u>Warrant</u>
1. Minimal use of warrants. Warrants only minimally reliable and relevant to the case. Warrants may include logical fallacies.
2. Some use of warrants. Though warrants allow the writer to make the bridge between data and claim, some distortion and informal fallacies are evident.
3. Extensive use of warrants. Reliable and trustworthy allowing rater to accept the bridge from data to claim. Slightly relevant. Evidence of some backing.

Table 11. Criteria for Judging the Quality of *Claim*, *Data*, and *Warrant*. (Source: *Linguistic/Rhetorical Measures for International Persuasive Student Writing*, By Ulla Connor (1990), Research in the Teaching of English, *24,* 67–87. Inter-rater reliability was .77 for claim, .56 for data and .66 for warrant.)

Using the rubric delineated above, three raters assessed 10% of the students'

compositions were assessed. The compositions were graded in terms of claim, data and

warrant. The scores for respective items of claim, data and warrant rank from 1 to 3

points. In this way, numerical data were generated so that differences in two groups in

terms of reasoning logic can be observed by using SPSS 17.0 to conduct the Hotelling

(multivariate) t-tests, which were applied to test the following null hypotheses:

$H_{0c1:}$ There is no difference with reference to the means of scores on claim in the

argumentative essays by the two groups of students.

$H_{0c2:}$ There is no difference with reference to the means of scores on data in the

argumentative essays by the two groups of students.

H_{0c3}: There is no difference with reference to the means of scores on warrant in

the argumentative essays by the two groups of students.

Table 14 shows data analysis methods in this section.

Toulmin's Model	Data Analysis Methods
Claim	Rating the quality of Claim according to the Rubric by three raters
Data	Rating the quality of Data according to the Rubric by three raters
Warrant	Rating the quality of Warrant according to the Rubric by three raters

Table 12. Data Analysis of Toulmin's Model.

As in the previous two sections, directions were offered to the raters as shown in

Appendix I, Section 3. In terms of the raters' judgments regarding essay Toulmin's

Model implementation, the inter-rater reliability was .52 for *claim*, .80 for *data*, and .82

for *warrant*. The reliability coefficient was lower than .70 for claim since, according to

post-hoc discussion with other raters, different understandings of the criterion for rating

claim may interfere with the rating consistency.

Validity of the Writing Assessment

Validity of the writing assessment has been defined from different facets.

Concerning my study, I decided to define validity of my writing assessment in this study

according to Samuel Messick's analysis. Messick regarded testing validity as a concept

composed of two aspects: construct validity and utility (Messick, 1988). Utility was not a

significant aspect for this study since the assessment conducted was for the purpose of

theoretical investigation, not for selection or replacement. The validity issue was focused

on the process of construct validation. Construct validity is defined as the degree to

which inferences can be legitimately made from the operationalization in the study to the

theoretical construct under study (Bachman, 2004). It is an issue of consistency of the

evidence and theory with the purpose of the assessment. In this study, the purpose was to

determine the association of cultural difference with Chinese EFL students'

argumentative writing. The results of both textual and interview data analysis

demonstrated overall consistency with the theoretical framework of contrastive rhetoric,

which means that the assessments have been validated in this respect.

Inter-rater Reliability

Inter-rater reliability was examined for research question 1. Two other raters were

asked to rate 10 % of the 60 compositions, that is, six compositions, in terms of three

indices: cohesion, topical structures, and Toulmin's Model. Considering the heavy load

of data analysis, I asked each of the raters to rate one or two sections. I made the

arrangements so as to have three raters to rate each section. The other raters were second

or third-year doctoral students in a Curriculum and Instruction PhD program. One of

them was a professor of College English, one of my former colleagues in China. The

raters for writing assessment can be from different professions in order to enhance the

representativeness of the rating criteria (Diederich, 1974). In my study, culture was the

construct to be taken into consideration. The raters' cultural backgrounds were expected

to diversity to avoid the writing assessment being culturally biased. So among the raters

are three Chinese native speakers who are or have been English teachers in China, one

English native speaker, one Spanish speaker and one Arabic speaker. They were not trained by me since, in that way, I might embed my hints concerning the rating into their judgments. If I were not one of the raters, but an authority in this field, I could provide the training. The fact was I was not an authoritative trainer but another rater, who expected others' assessment to be consistent with my assessment results. Therefore, I just provided the most essential information for explaining concepts and how to assess the compositions: definition and/or directions with examples to demonstrate the definition or assessing procedures. This was the same cognitive process I have gone through when I was assessing the compositions. The directions for the raters have been elaborated upon in the previous methodology section. If the inter-rater coefficient was above .70, my scores were acceptable (Bachman, 2004). If the coefficient was lower than.70, I discussed with the other raters to find out possible reasons for the low coefficients.

Procedures of Data Interpretation

Chapter V is devoted to the interpreting of results obtained from quantitative data analysis and answering the three research sub-questions of Research question 1. Research question 1 (Is coherence in Chinese students' compositions different from that in the U.S. students' compositions?) and its sub-questions were answered with the results of the statistical analysis. In interpreting the differences in terms of cohesive devices, topical structures and Toulmin's Model of claim, data and warrant, previous research is referred to make sense out of the findings. Major previous research findings have been synthesized in Chapter II.

Methodology for Research Question 2

Methods of Data Collection

      Interviews. In this study, 24 Chinese and 7 U.S. college students whose

compositions were selected to be studies were interviewed. The interviews were

conducted with an interview protocol, which is a written version of the main questions in

English (Rubin & Rubin, 2005). The first set of interview questions in the interview

protocol were developed through literature review. After the preliminary data analysis of

the first interview and based upon the emergent themes, the second set of interview

questions were developed (See Appendix H). Interviews were recorded and transcribed

for data analysis. The interviewer interviewed in Chinese and/or English to facilitate

communication with the interviewees. Participants could answer the questions in English

and/or Chinese as they felt comfortable. When the responses in Chinese were quoted,

both the Chinese responses and English translation were presented in the text for the

readers' convenience to read and check the truthfulness of the quotations if possible.

      Memos

      Writing memos is a research strategy for qualitative data analysis (Corbin and

Strauss, 2008; Charmaz, 2000). Researchers are urged to jot down their thinking when

coding the data (Corbin and Strauss, 2008). Memos help the researchers to identify

themes and associate them with one another to formulate overarching themes. This

process of coding was recorded by memo writing, which was also regarded to be a source

of data and analyzed during data analysis process. For instance, when I was doing text analysis of students' compositions, I wrote in my memo:

> Contents of students' writing are associated with their majors. U.S. education students talked a lot about teachers, students and classroom instruction while Chinese law students may talk about law and regulation and incline to think in a way shaped by their major of law.

Such reflection about the association between writing and academic background of the writers helped me to make possible further interpretation about the difference in cross-cultural writing. Actually, during qualitative data analysis, many ideas might occur to me and be kept down in the memo, which was necessary for data interpretation. Another important example during data analysis was worthwhile to mention, which enriched the research inquiry of this dissertation study by inspiring me to add the third research question to examine the interaction between the factors in research question 2. In this way, this inquiry went more insightful. Here was what I wrote down in the memo:

> Chinese:
>
> Language: Chinese students used many reiterations to form paralleling sentences in order to accumulate emotions.
>
> Rhetoric: This is due to rhetorical convention of stressing the importance of emotions in a composition.
>
> Culture: Close human relationship has been valued. Writers did so for they hold the belief that their emotional words may arouse empathy among the

readers. The readers should be very concerned about people in the society who care about others' feelings.

U.S.

Language: Pronouns are greatly utilized in two groups of students' compositions, but American students use more than Chinese students. Rhetoric: the importance of telling personal experiences is stressed in American rhetoric. But in Chinese rhetoric, objectivity should be valued. What can be identified as powerful data should be identified by mass media or authorities.

Culture: American students attach more importance to "me" or the individual writer's self feelings and perception. This is perceived as individualism in cultural studies.

Methods and Procedures of Data Analysis

In Chapter 6, factors associated with Chinese students' English compositions are elaborated upon in order to find out the reasons for the results obtained from research question 1. The conceptual model was applied as the theoretical framework to interpret data analysis findings, and inversely, the model was expected to be modified by this study. The hypothesis of contrastive rhetoric was related with the findings of both Chapters V and VI, which stated that Chinese students might utilize different thinking patterns in their argumentative compositions. Research question 2 is aimed to inspect the linguistic, rhetorical and cultural factors associated with argumentative coherence in

Chinese students' essays. To answer this question, qualitative methods were applied. Data obtained from interviews and memos were analyzed by open coding, axial coding, and the constant comparative method.

Open Coding. Open coding is used to break the qualitative data into parts and then identify themes from the parts while they emerge during the process of analyzing (Creswell, 2007). In this study, I broke the data into parts with reference to the interview protocol (See Appendix H). Themes were identified in each part and the same themes were searched for across the parts.

Axial Coding. Axial coding of the qualitative data was conducted after open coding. This data analysis method is to inter-relate isolated themes to formulate categories and subcategories so as to build up a theoretical framework to interpret the data (Charmaz, 2000; Corbin and Strauss, 2008; Creswell, 2007).

The Constant Comparative Method. In this study, qualitative data were analyzed by constantly comparing and contrasting data from different participants' compositions, interviews, and my research memos. During the process of comparison and contrast, categories and subcategories emerged, and a thematic framework composed of categories and sub-categories were refined constantly (Charmaz, 2000; Corbin & Strauss, 2008; Glaser and Strauss, 1967) to answer Research Question 2. Since there were three sources of qualitative data—texts, interviews and memos—data analysis was conducted in two steps. First, I analyzed text data and interview data respectively; at the same time, I wrote memos to keep record of my reflections upon the data analysis. Second, I compared three types of data: I used text data to support interview data, and then I used interview data to

support my textual analysis. By this inter-compensatory data analysis, I formulated a thematic framework to answer research question 2 by means of taking down the process of mental formulation in my research memos.

Validity and Reliability

  Triangulation. Triangulation refers to using more than one source of data or more than one method of data analysis (Bogdan & Biklen, 2007). It has been regarded as a major strategy that could make it more likely to conduct a more credible qualitative study (Lincoln & Guba, 1985). In a qualitative study, triangulation strategies, reflective journals, member checking, and peer review can be adopted to make the study more credible.

  In this study, triangulation of methods of data collection was applied to enhance the study quality. Students' compositions were collected to be analyzed, combined with interviewing Chinese students regarding how both big culture and small culture associated with Chinese students' English writing. Data collected from the two sources were used to support or refute the claim that cultural factors are related to Chinese students' English writing. This study is to examine coherence in college students' argumentative essays as well as the intercultural rhetorical factors associated with the differences in the argumentative coherence presented by the essays by two groups of students. The validity issue in this study is how to manage subjectivity and enhance transparency in the study process. Thus, to enhance credibility, reflective journal, member checking, peer review, and triangulation strategies were adopted (Merriam, 2002).

Reflective Journal. Keeping a reflective journal may be an effective strategy for asserting validity of a research study (Merriam, 2002; Ortlipp, 2008). Ortlipp (2008) suggested that researchers' biases could be managed by reflective journals in which researchers write down their experiences, opinions, thoughts and feelings. Such a reflexive approach to the research process was helpful to enhance the transparency of my research study. In other words, in my project, I might take something for granted or have biases. However, subjectivity may be managed with the help of reflective journals, in which I record important messages in the research process including reflections upon the research paradigm, interactions between the committee members and me, research methods and ideological conflicts between my values and beliefs and those in the U.S. academic community.

I began a reflective journal while formulating this study proposal. It contains my reflections in the process of decision making during the proposal formulation. The journal helped me clarify methodological and epistemological confusions in conceptualizing the study. Doing so helped me record my mental process of formulating the study by narrowing down a general research concern to specifying specific the research topic with appropriate research methodology. In the mental processes were involved initial enthusiasm, concerns, and confusions. Mental processes also included my review of journal articles and books that gave me inspirations to specify a researchable topic. Therefore, the journal was tremendously helpful at the stage of proposing the study. Take the formulation of research questions as an example. In this study, it was complex to formulate the research questions, which were generated by theoretical analysis as well as review of previous studies. At the initial stage of proposing the study, I was not certain

what ideas might be useful to complete the proposal. So, whatever occurred to me, I wrote it down in the journal, and then if the idea was important for the proposal, I could transfer that part to the main body of the proposal. In other words, the proposal actually emerged in my day-to-day journal writing. In addition to keeping the reflective journal, I also implemented such strategies as peer review and member-checking to manage subjectivity in the research (Merriam, 2002).

Member Checking. Member checking refers to a strategy where the principal researcher asks participants to check data interpretation to see if they agree with the way their comments are interpreted (Bogdan & Biklen, 2007). If there are any discrepancies, the researcher can discuss discrepancies with the participants. Inspirations are often aroused by such discussion, thus enriching data interpretation. In this study, I showed Chinese students the results of data analysis and asked for their responses to see if they would accept the results. Afterwards, I asked them to comment about my data interpretation to see if they agreed with the way I understood their compositions.

Peer Review

Peer review is another strategy that helps manage researchers' subjectivity and increases credibility in qualitative studies by asking peers to review data analysis and data interpretation (Bogdan & Biklen, 2007; Merriam, 2002). The reviews provided by the peers inspire the researcher to have more reflections during the research process and refine the thematic frameworks generated from data analysis and serving to guide data interpretation. In this study, English teachers in China and fellow doctoral students were

asked to review data analysis and interpretation to enhance the quality of the study and make sure that the study can meet the criteria of a good dissertation in the academic community. I discussed with my colleagues and fellow doctoral students if they agreed with the analysis and interpretation of the interview and textual data. Their challenging questions were the impetus for me to consider and reconsider the logistics of the analysis and interpretation of the data. One doctoral fellow inquired about whether the labels in cohesive devices, topical structures and Toulmin's Model were inclusive and accurate. I was similarly confronted by this issue during data analysis to determine the cohesive devices, topical structures and components of Toulmin's Model in students' essays. If the labeling was not accurate, it would be impossible for them to represent or generalize linguistic items in natural language. In other words, if these labels were not identified from extensive survey of natural language, they could not be adequately representative. In this study, during data analysis, I found that the labels for cohesive devices, topical structures and Toulmin's Model could be recognized as representative since students' essays could be analyzed sufficiently in terms of these labels, which empirically supported that these labels were representative enough to analyze students' English essays.

Methodology for Research Question 3

Research question 3 was aimed at examining the inter-relation between the linguistic, rhetorical and cultural factors by a triangulation strategy of qualitative data analysis and correlational studies among the 16 variables. The qualitative part analyzed data from student compositions, interviews, and research memos; the co-relational studies were not exhaustive but focused upon a few pairs of variables, selected according to the inferences made from qualitative data analysis. As a matter of fact, the co-relational studies were conducted to check the reliability of those inferences as a triangulation strategy.

Synopsis

This contrastive rhetorical study adopted a mixed methods design to examine the differences in coherence manifested by the argumentative essays written by Mainland Chinese and U.S. college students. Factors associated with the difference were also studied. Data were collected from the sources of texts and interviews. Textual data were analyzed by Hotelling (multivariate) t-test statistical procedures while interview data were analyzed by open and axial coding. In order to enhance the credibility of this qualitative study, reflective journals, peer-review, member-check, and triangulation were utilized in the study process. In order to enhance the reliability of rating compositions, three raters were asked to rate them in terms of three indices. In order to avoid Type II error in the Hotelling (multivariate) t-test, the significance level (α) was identified to

be .05 for the one-tailed test and it was not adjusted due to the strong theoretical

underpinnings (Newman, Fraas & Laux, 2000). A sample of 60 individuals was evenly

divided into two groups of 30 in the study.

Chapter V

Statistical Examination of Differences in Argumentative Coherence

In this study, argumentative coherence in essays written by Chinese and U.S.
undergraduates was examined by referring to three indices: cohesion, topical structures
and Toulmin's Model. In terms of cohesion, according to Carroll (1999, 2007), there
were 9 types of cohesive devices, which were considered as 9 variables to be compared in
order to observe the differences in argumentative essays written by two groups of
students. Concerning topical structures, there were three types of sentential progression:
paralleling, sequential and extended paralleling progression. The number of T-units was
also counted and compared. Then, the means of the proportions of each type of sentential
progression to the number of T-units were compared across two groups' essays.
Regarding Toulmin's Model, claim, data, and warrant were considered as three variables
and compared across two groups' of essays. Both descriptive and inferential statistics
were applied. Descriptive statistics were used to illustrate the differences in the data in
the study; inferential statistics were utilized to test hypotheses about the differences
between two groups of populations represented by the two groups' of samples
respectively. The differences were examined across 16 variables: pronominal reference,
demonstrative reference, comparative reference, substitution, ellipsis, conjunction,
reiteration, synonymy, hyponymy (in cohesion); T-units, paralleling progression,
sequential progression and extended sequential progression (in topical structures); and
claim, data, and warrant (in Toulmin's Model). Hotelling t-test was conducted to study

the differences since it should be used when the effects of one independent variable on more than one dependent variable across two groups are examined.

In this chapter, research question 1 is answered by referring to the results obtained through both descriptive and inferential statistics. Research question 1 has three sub-questions, which are answered one by one in the following sections, with the hypotheses generated from each of the sub-questions tested. Here is research question 1 its corresponding 3 sub-questions:

1. Is coherence in Mainland Chinese EFL students' argumentative compositions different from that of English speaking U.S. students' compositions with reference to the model of argumentative coherence? If so, how?

    a. What differences can be found in terms of frequencies of different cohesive devices used in the argumentative essays by the two groups of students?

    b. What differences can be found pertaining to the frequencies of three types of sentential progression and T-units in the argumentative essays by the two groups of students?

    c. What differences can be found with reference to the means of scores on three indices of claim, data and warrant in the argumentative essays by the two groups of students?

Cohesive Devices

This study's index of cohesion—that is, frequencies of different cohesive devices used in the argumentative essays—is composed of 9 variables (which are described below in Table 12): pronominal reference (PRON), demonstrative reference (DEMON), comparative reference (COMP), substitution (SUBSTI), ellipsis (ELLIP), conjunction (CONJUN), reiteration (REIT), synonymy (SYNON), hyponymy (HYPO). As a reminder, the definition table is presented here again:

Categories of Cohesion.

Category	Example
Reference	
Pronominal	The woman lost track of her little boy at the mall. *She* became very worried.
Demonstrative	*That* was the worst exam I had all term.
Comparative	It's the *same* band we heard last week.
Substitution	My computer is too slow. We need to get a faster *one*.
Ellipsis	I wish I had more talent. My sister has a lot *more* than I do.
Conjunction	Melissa flunked out of school, so she is looking for a job.
Lexical	
Reiteration	I saw a boy win the spelling bee. The *boy* was delighted afterward.
Synonymy	I saw a boy win the spelling bee. The *lad* was delighted afterward.
Hyponymy	I saw a boy win the spelling bee. The *child* was delighted afterward.

Source: *Psychology of Language*, by David Carroll, 1999, 2007

The frequencies of the cohesive devices concerning these 9 variables were counted and compared across two groups. To examine and compare these 9 variables thoroughly, both descriptive and inferential statistics were applied to probe the consistency between and across results obtained by the two types of statistics. Descriptive

statistics help to illustrate the case concerning the specific samples in this study while inferential statistics provide the extent to which the results of this study can be generalized to the population that the samples in this study are representative of (Johnson and Christensen, 2008). A point of note here is that the samples in this study can't represent every Chinese or U.S. college student. With respect to the Chinese students, the samples can be representative of those Chinese college students whose English proficiency as well as English writing proficiency is good enough for them to deliver their meanings smoothly and comfortably. With respect to U.S. students, the samples are representative of U.S. students educated in U.S. schools since the elementary level. In other words, these students have been taught how to write in English in U.S. schools of elementary, secondary, and post-secondary levels.

Descriptive and Inferential Statistics

Descriptive statistics were applied to describe in details the characteristics of data obtained from two groups in terms of cohesion across 9 variables. Table 15 demonstrates that in Chinese students' essays, the frequencies of conjunctions and pronominal reference were the highest with means of more than 27 per essay per student, the second rank demonstrative reference and reiteration with means of more than 10, the third ranks comparative reference with a mean of more than 5, and the rest of the variables have means less than 1. To sum up, the data shows that Chinese college students in this study made use of more conjunction and pronominal reference than they used the rest of the variables. The frequencies of utilizing substitution, ellipsis, synonymy, and hyponymy were very low.

	PRON	DEMON	COMP	SUBSTI	ELLIP	CONJUN	REIT	SYNON	HYPO
N Valid	30	30	30	30	30	30	30	30	30
Missing	0	0	0	0	0	0	0	0	0
Mean	27.90	17.47	5.30	.70	.50	28.47	10.17	.67	.20
Median	26.00	16.50	5.00	.00	.00	27.00	10.00	.00	.00
Mode	19.00	16.00	3.00	.00	.00	26.00[a]	10.00	.00	.00
Range	46.00	25.00	8.00	3.00	3.00	29.00	26.00	3.00	5.00
Minimum	13.00	7.00	2.00	.00	.00	15.00	1.00	.00	.00
Maximum	59.00	32.00	10.00	3.00	3.00	44.00	27.00	3.00	5.00

Table 13. Descriptive Statistics of Frequencies of Cohesive Devices in Chinese Students' Essays.

Table 16 shows similar results in U.S. students' essays. The frequencies of conjunctions and pronominal reference were the greatest with means of more than 32 per essay per student. Second in rank were demonstrative reference and reiteration with means of more than 12 per essay per student. Third were comparative reference and synonymy with means of more than 1 per essay per student, while the rest of the variables—substitution, ellipsis, synonymy and hyponymy— had means less than 1. To sum up, from the data, I found that U.S. college students, in a fashion similar to Chinese college students, made use of more conjunction and pronominal reference than other variables. The frequencies of using substitution, ellipsis, and hyponymy were the least implemented.

		PRON	DEMON	COMP	SUBSTI	ELLIP	CONJUN	REIT	SYNON	HYPO
N	Valid	30	30	30	30	30	30	30	30	30
	Missing	0	0	0	0	0	0	0	0	0
Mean		33.23	15.77	4.77	.20	.50	32.80	12.40	1.73	.00
Median		31.50	15.50	4.00	.00	.00	31.50	12.50	1.00	.00
Mode		21.00[a]	14.00	4.00	.00	.00	28.00	7.00[a]	.00	.00
Range		56.00	23.00	11.00	3.00	2.00	34.00	26.00	5.00	.00
Minimum		14.00	5.00	1.00	.00	.00	22.00	.00	.00	.00
Maximum		70.00	28.00	12.00	3.00	2.00	56.00	26.00	5.00	.00

Table 14. Descriptive Statistics of Frequencies of Cohesive Devices in U.S. Students' Essays.

Table 17 shows comparative data of cohesive devices between Chinese and U.S. students. Inferential statistics is applied to examine the differences in terms of cohesive devices between the Chinese college students' population represented by the samples from China and the American students' population represented by the samples from the U.S. The Hotelling t-test is conducted at the significance level of .05 for one-tailed tests. Table 17 demonstrates that there are significant differences between two groups in terms of pronominal reference, substitution, conjunction, and synonymy. In fact, the mean proportion of instances of pronominal reference (p=.036, one-tailed), conjunction (p=.017, one-tailed) and synonymy (p=.003, one-tailed) in U.S. students' essays are significantly greater than those in their Chinese peers' essays while the mean of substitution in Chinese students' essays is greater than their U.S. peers' essays (p=.009, one-tailed). No

significant differences were found from the means of the rest of cohesive devices though

with the descriptive statistics, we have found some differences in the data.

	GROUP	N	Mean	SD	Std. Error Mean	F	Sig. (one-tailed)
PRON	**CHN**	30	27.90	10.41	1.90	*3.362*	*.036*
	USA	30	33.23	12.05	2.20		
DEMON	**CHN**	30	17.46	5.59	1.02	1.378	.123
	USA	30	15.76	5.62	1.02		
COMP	**CHN**	30	5.30	2.33	.42	.724	.199
	USA	30	4.76	2.51	.45		
SUBSTI	**CHN**	30	**.70**	.91	.16	*5.863*	*.009*
	USA	30	.20	.66	.12		
ELLIPSIS	**CHN**	30	.50	.82	.14	.000	.500
	USA	30	.50	.77	.14		
CONJUNCT	**CHN**	30	28.46	7.60	1.38	*4.788*	*.017*
	USA	30	**32.80**	7.73	1.41		
REITERATION	**CHN**	30	10.16	5.50	1.00	2.160	.074
	USA	30	12.40	6.25	1.14		
SYNONYMY	**CHN**	30	.66	1.02	.18	*8.351*	*.003*
	USA	30	**1.73**	1.74	.31		
HYPO	**CHN**	30	.20	.92	.16	1.403	.121
	USA	30	.00	.00	.00		

Table 15. Comparative Statistics of the Means of Frequencies of Cohesive Devices in Chinese and U.S. Students' Essays.

Topical Structure Analysis

In the section of topical structure analysis, there are four variables to be compared across two groups. They are T-units, parallel progression, sequential progression, and extended parallel progression. As a reminder, the illustration about the topical structures is as follows:

Topical Progression

Topical progression	Definition	Conceptual representation	Example
Parallel progression	topics of successive sentences are the same, producing a repetition of topic that reinforces the idea for the reader	<a, b>, <a, c>, <a, d>	At times absolute **honesty** may be difficult. **It** may even hamper progress and development. **Honesty** needs to be kept in mind because there is cause and effect relationship in this world.
Sequential progression	topics of successive sentences are always different, as the comment of one sentence becomes, or is used to derive, the topic of the next	<a, b>, <b, c>, <c, d>	Although there is are **times** when you must say the partial truth. **Most times** the social rules we have stop us from sharing what we truly believe. **Sensitive issues sometimes** require us to fib from time to time.
Extended parallel progression	the first and the last topics of a piece of text are the same but are interrupted with some sequential progression	<a, b>, <b, c>, <a, d>	I live my life by **being brutally honest**. If I am asked a question I will answer truthfully. Although there is are times when you must say the partial truth. Most times the social rules we have stop us from sharing what we truly believe. Sensitive issues sometimes require us to fib from time to time. So is **honesty** always the best way to go?

In the section, the same descriptive and inferential statistics are used to describe and analyze data. Descriptive statistics were used to describe the characteristics of the data obtained from two groups while inferential statistics were used to study the inferences about the population represented by the samples in this study.

Descriptive and Inferential Statistics

Descriptive statistics were applied to describe the characteristics of data obtained from two groups in terms of topical structures across 4 variables. Table 18 demonstrates that in the Chinese students' essays, sequential progressions were the most frequently implemented. We then see the parallel progression, followed by extended parallel progression.

		T-UNIT	PARALLEL	SEQUENTIAL	EXTENDED PARALLEL
N	Valid	30	30	30	30
	Missing	0	0	0	0
Mean		22.46	.23	.49	.21
Median		21.50	.26	.50	.21
Mode		22.00	.29	.50	.25
Range		24.00	.55	.46	.26
Minimum		16.00	.00	.23	.09
Maximum		40.00	.55	.69	.35

Table 16. Descriptive Statistics of Frequencies of Topical Structures in Chinese Students' Essays.

Table 19 shows that similar results are found in the U.S. students' essays. In the Chinese students' essays, the mean of the proportions of sequential progression was the greatest, followed by parallel progression, and extended parallel progression.

		T-UNIT	PARALLEL	SEQUENTIAL	EXTENDED PARALLEL
N	Valid	30	30	30	30
	Missing	0	0	0	0
Mean		21.10	.22	.53	.19
Median		21.00	.19	.53	.18
Mode		19.00[a]	.12[a]	.50	.21
Range		12.00	.34	.35	.22
Minimum		16.00	.08	.37	.05
Maximum		28.00	.42	.71	.27

Table 17. Descriptive Statistics of Frequencies of Topical Structures in U.S. Students' Essays.

Table 20 shows comparative data of topical structures between Chinese and U.S. students. Statistics shown in Table 20 displays the examination of differences in terms of topical structures between the Chinese college students' population represented by the samples from China and the U.S. students' population represented by the samples from U.S. No significant differences were found from the means of the frequencies of T-unit and the mean of the proportions of parallel and sequential parallel progression with the descriptive statistics. However, Table 20 demonstrates that the significant value in terms of extended paralleling progression were .045 (one-tailed). Specifically, the mean of the proportion of extended paralleling progression in Chinese students' essays is possibly greater than that in their U.S. peers' essays since the significant value is .045(one-tailed).

	GROUP	N	Mean	Std. Deviation	Std. Error Mean	F	Sig. (one-tailed)
T-UNIT	CHN	30	22.46	4.87	.89	1.668	.101
	USA	30	21.10	3.13	.57		
PARALLEL	CHN	30	.23	.12	.02	.461	.250
	USA	30	.22	.09	.01		
SEQUENTIAL	CHN	30	.49	.10	.01	2.263	.069
	USA	30	.53	.08	.01		
EXTENDED PARALLEL	CHN	30	*.21*	.06	.01	2.951	***.045***
	USA	30	.19	.04	.01		

Table 18. Comparative Statistics of the Means of Frequencies of Topical Structures in Two Groups' Students' Essays.

Toulmin's Model

In this section, the means of scores on three indices of claim, data, and warrant in the Chinese and U.S. student argumentative essays are compared so that research question 1c may be answered. In the section, the same descriptive and inferential statistics were used to describe and analyze data. Descriptive statistics were used to describe the characteristics of the data obtained from two groups while inferential statistics was used to study the inferences about the population represented by the samples in this study. As a reminder, the three concepts of claim, data and warrants are explained below again:

Toulmin's Model

Toulmin's Model	Definition	Example
Claim	A conclusion whose merit must be established	if a person tries to convince a listener that he is a British citizen, the claim would be "I am a British citizen." (1)
Data (Evidence)	A fact one appeals to as a foundation for the claim	the person introduced in (1) can support his claim with the supporting data "I was born in Bermuda." (2)
Warrant	A statement authorizing movement from the data to the claim	In order to move from the data established in (2), "I was born in Bermuda," to the claim in (1), "I am a British citizen," the person must supply a warrant to bridge the gap between 1 and 2 with the statement "A man born in Bermuda will legally be a British citizen." (3)

(Source: Toulmin, 1956, 2003)

Descriptive and Inferential statistics

Descriptive and inferential statistics were applied to describe in details the characteristics of data obtained from two groups in terms of Toulmin's Model across three variables: claim, data, and warrant. Table 21 demonstrates that in Chinese students' essays, the mean of the scores on data was a little higher than the mean of the scores on claim, and the mean of the scores on claim was a little higher than the mean of the scores on warrant. Table 22 shows that in U.S. students' essays, the mean of the scores on claim is higher than the mean of scores on warrant while the mean of scores on warrant is a little higher than the mean of the scores on data.

		CLAIM	DATA	WARRANT
N	Valid	30	30	30
	Missing	0	0	0
Mean		2.28	2.32	2.18
Median		2.00	2.10	2.25
Mode		2.00	2.00	2.50
Range		1.50	1.50	2.00
Minimum		1.50	1.50	1.00
Maximum		3.00	3.00	3.00

Table 19. Descriptive Statistics of Scores on Three Variables in Chinese Students' Essays.

		CLAIM	DATA	WARRANT
N	Valid	30	30	30
	Missing	0	0	0
Mean		2.22	2.03	2.05
Median		2.00	2.00	2.00
Mode		2.00[a]	1.50	1.50
Range		2.00	1.50	2.00
Minimum		1.00	1.50	1.00
Maximum		3.00	3.00	3.00

Table 20. Descriptive Statistics of Scores on Three Variables in U.S. Students' Essays.

Inferential statistics were applied to examine the differences in terms of Toulmin's Model across three variables between the Chinese college students' population represented by the samples from China and the U.S. student population represented by the sample from U.S. Table 23 demonstrates that there are significant differences

between two groups in terms of the means of scores on data. Specifically, the mean of the

scores on data in Chinese students' essays is significantly greater than that in their U.S.

peers' essays with *p*-value of .018 (one-tailed). No significant differences were found

from the means of scores on claim and warrant though with the descriptive statistics, we

have found some differences in the data.

	GROUP	N	Mean	Std. Deviation	Std. Error Mean	F	Sig. (one-tailed)
CLAIM	**CHN**	30	2.28	.59	.10	.178	.337
	USA	30	2.21	.62	.11		
DATA	**CHN**	30	**2.32**	.53	.09	4.684	***.018***
	USA	30	2.03	.50	.09		
WARRANT	**CHN**	30	2.18	.59	.10	.722	.200
	USA	30	2.05	.62	.11		

Table 21. Comparative Statistics of the Means of the Scores on Three Variables in Two Groups' Students' Essays.

Synopsis

In this chapter, research question 1 and its three sub-questions were answered by

means of descriptive and inferential statistics. Descriptive statistics described the

differences of argumentative coherence in the essays written by students in the samples

of 30 Chinese and 30 U.S. undergraduates from whom data were collected. Inferential

statistics were used to test hypotheses about difference of argumentative coherence in the

populations represented by the samples. After statistical data analysis, I found that there

were differences in terms of cohesion, topical structures, and Toulmin's Model across

16 variables. As for cohesion, Hotelling *t*-test statistical procedures revealed that the means of **pronominal reference**, **conjunction, reiteration, and synonymy in U.S. students' essays were significantly greater** than those in their Chinese peers' essays while the mean of **substitution in Chinese students' essays was greater** than their U.S. peers' essays. No significant differences have been found from the means of the remaining cohesive devices though with the descriptive statistics, some differences were found in the data. Regarding topical structures, Hotelling *t*-test procedures showed that the mean of the proportions of **extended paralleling progression** in Chinese students' essays was greater than the mean in their U.S. peers' essays. No significant differences in the means of the frequencies of T-unit and the means of the proportions of paralleling progression though with the descriptive statistics, some differences were found in the data.

Concerning Toulmin's Model, the means of the scores on all three variables in Chinese students' essays were greater than those in U.S. students' essays. Of particular note, the mean of the scores on **data in Chinese students' essays was significantly higher** than that in U.S. students' essays. No significant differences were found from the means of scores on claim and warrant.

In the next chapter, the results of research question 1 will be interpreted by exploring linguistic, rhetorical, and cultural factors associated with Chinese students' English argumentative writing. Findings of qualitative analysis of interview data are presented to build the association between different aspects of coherence and the three factors, as well as among the aspects and factors. Previous related studies are referred to as one way of strengthening the arguments for the association.

Chapter VI

Cultural, Rhetorical, and Linguistic Factors

Through data analysis, some significant differences were found regarding coherence features in Chinese and U.S. undergraduate essays. In terms of cohesion, Hotelling *t*-test statistical procedures revealed that the means of pronominal reference, conjunction, reiteration, and synonymy in U.S. students' essays were significantly greater than those in their Chinese peers' essays. Meanwhile, the mean of substitution in Chinese students' essays was greater than their U.S. peers' essays. As for topical structures, the significant value of the difference between the mean of the proportions of extended paralleling progression in Chinese students' essays and the mean in their U.S. peers' essays was less than .05 for a one-tailed test. For Toulmin's Model, the means of the scores on all three variables in Chinese students' essays were greater than those in U.S. students' essays. Of particular note, the mean of the scores on *data* in Chinese students' essays was significantly higher than that in U.S. students' essays.

Based upon the theoretical review in Chapter II and Chapter III, one might infer that culture is associated with argumentative coherence in cross-cultural writing. Or, Chinese students' argumentative coherent features differ from those in their U.S. peers due to their different cultural background that impacts their English writing. Culture, as a complex concept and construct, needs to be analyzed to generate specific cultural factors so that cultural associations with Chinese students' argumentative writing can be explored. In this study, culture was recognized to include three factors: linguistic, rhetorical, and cultural factors in the narrow sense, as conceptualized and reviewed in

Chapter III. Three factors of culture, linguistics, and rhetoric have been discussed in

Chapter III, in which contrastive studies in Chinese and English context were reviewed

and all the three factors stood out as associated with ESL writing. The qualitative study

section of this dissertation was conducted in order to probe alternative explanations

concerning these three cultural factors for coherence differences found in two groups'

essays. These explanations from 60 participants from China and the U.S. were derived

via qualitative interviews with open-ended questions (See Appendix H). Additionally,

qualitatively analyzing Chinese and U.S. students' compositions was complementary to

interview data analysis. The findings of all the qualitative analysis provided implications

to answer the second research question:

> What cultural, rhetorical, and linguistic factors are identified to be associated
>
> with the coherence differences in Mainland Chinese EFL and U.S. English
>
> speaking college students' argumentative compositions?

The third research question: "How are the linguistic, rhetorical and cultural factors inter-

related with one another?" will be answered after the examination of research question 2

as a theoretical summary of the whole dissertation project. Such a summary can shed

light upon the relationship between 16 variables and the three factors of language, culture

and rhetoric.

Cultural Factors

As briefly explained in Chapter 1, when the theories of contrastive and intercultural rhetoric were introduced, the concept of culture defined in this section refers to both big culture and small culture (Atkinson, 2004). Atkinson (2004) conceptualized culture as complex as a model composed of national culture, professional-academic culture, youth culture, classroom culture and students' culture. These aspects or categories of culture have been identified not only by this study but others reviewed in Chapter III, as cultural elements associated with Chinese students' English writing. In the following sections, the cultural association with Chinese students' English writing is explored to shed light upon how culture impacts writing, which was demonstrated in this study. In other words, the results of the qualitative section of the study are discussed in the following sections, following the conceptual framework of culture provided by Atkinson (2004).

Through the textual analysis of compositions and qualitative analysis of interview data, I found the following phenomena: a) attention to national culture through collectivism and individualism, b) schematic differences of thinking patterns presented in the students' essays, and c) presentation of the impacts of small culture or personal culture in the rhetorical choices in the essays. The following is a detailed description of the observed phenomena derived from data analysis.

National Culture: Collectivism and Individualism

At the very beginning of this section, I want to restate the lens of national culture and the concepts of collectivism and individualism presented in the literature review in Chapter II, just to orient readers to important information regarding a notional framework in which the following findings are located. National culture is interpreted as ideological characteristics of a culture or something in people's minds (Atkinson, 2004). In this category exists a pair of binary opposing terms—collectivism and individualism—denoting beliefs and values in human relationships and community—or self-dependence. Collectivism is often associated with pursuit of social harmony, positive human relationships, in alignment with well-established values of social hierarchical orders, and respect for the authoritative (Snively, 1999).

Additionally, though, prior to Snively, Oliver (1971) explained the characteristics of Asian rhetoric and contrasted Asian rhetorical collectivism with the western value in creative writing. He stated that for Asian people, the primary function is to promote social harmony rather than enhancing the welfare of the individual speaker or writer. Some valued or approved patterns were expected to be adhered to while individualized argumentation should be avoided. Following this ideological overtone, Chinese students were taught to regard texts written by widely recognized writers and teachers as authoritative. The way to teach writing was to present the model and authoritative texts to the students, who studied them and imitated the rhetorical features including the rhetorical patterns and rhetorical devices in their own writing (Li, 2002). In the process of such teaching, rhetorical conventions were handed down and developed. Regardless of the great changes in the last two centuries, patterns of traditional Chinese rhetoric have

persisted in the contemporary Chinese society and Chinese writing instruction (Garrett, 1991; Kaplan, 1967; Matalene, 1985). Chinese writing instruction was impacted by Chinese big culture. As a developmental factor (Mohan & Lo, 1985), the way Chinese students were taught to write in Chinese greatly defined Chinese students' rhetorical practices and preferences in Chinese writing. What they have learned in Chinese writing instruction would be probably more or less transferred to their English writing (Mohan & Lo, 1985). The summary of this contrastive analysis can be found in the following table:

CHN	**Collectivism** manifested in classroom instruction which stresses the importance of following well-established patterns and rhetorical devices	2 rhetorical patterns: *起承转合, 引议联结*	*Students followed these patterns as the macrostructure of their English essays.*
		Rhetorical devices	*Appropriate use of rhetorical devices was recognized as good writing.*
		Toulmin's Model: claim, data and warrant	Data were identified to have the following categories: *Social events, Rebuttal, Authoritative, Story telling, Inferential arguments*
USA	**Individualism** manifested in students' essays not to follow set rhetorical patterns though students may know some patterns.	Three Variations to 5-paragraph essay	*As illustrated on Page 170*
		Natural flow of personal feelings	*As illustrated in the section of personal culture, on Page178*

Table 22. National Culture: CHN vs. USA.

Findings from Chinese Students

Two rhetorical patterns: 起承转合 and 引议联结. The findings of post-hoc

textual analysis of students' compositions in addition to quantitative analysis supported

what was claimed in the paragraph above. In alignment with the assumption that

conventional rhetorical patterns were far from dead in contemporary Chinese society,

some conventional rhetorical patterns were recognized in the 30 compositions collected

for the study. They are the modified versions of rhetorical conventions such as eight-

legged essays, or *qichengzhuanhe* 起承转合. The eight-legged rhetorical pattern was no

longer composed of eight parts but rather of claim, sub-claims, and supporting examples.

This conventional rhetorical pattern appears to be simplified and yet, actually, the

rhetorical pattern is still circular since there can be several sub-claims, leading the writing

to be increasingly insightful and approaching to the core of the topic. The pattern of

qichengzhuanhe 起承转合 was still in use and had been found from Chinese student

English essays. The pattern has been demonstrated in Huangshi's essay:

Honesty is the best policy.

起 *qi* (inception)	In the past, our ancestors slept with their doors open at night and never worried about whether there was a thief. What a harmonious and wonderful society it was! However, nowadays the world is full of material desires, and more and more people are used to telling lies. So people don't trust each other any more. It's fundamental and necessary to call back the position of honesty.
承 *cheng* (continuation)	First of all, honesty can bring us lots of opportunities to succeed. Under most circumstances, people would prefer to believe in honest

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	persons. For instance, when you seek for a job, the interviewers will prefer to select the honest interviewees rather than the dishonest ones because they hold the idea that honest ones are more worthwhile trusting
	It is said in a Chinese proverb that honesty is a magic medicine to make people relaxed. If someone is angry with you, you'd better tell the truth. Honesty can effectively relief his anger and he might forgive you, otherwise you're likely to bring trouble to yourself.
转 *zhuan* (transition)	Nevertheless, some people may point out that the world won't be fascinating if all people are honest. They firmly believe that the wonderfulness of the world requires dishonesty. However, you get excited when a journey starts, don't you? You feel delightful while seeing an excellent performance, don't you? So how can you deny that these could also make the world wonderful?
合 *he* (conclusion)	We can never emphasize too much the importance of honesty. Not only can it pure our mind and improve ourselves, but it can also lead us to approach the goal of "harmonious society". It's the most valuable.

However, while I had forecasted as a result of my review of literature that we might see *qichengzhuanhe* 起承转合 patterns in the essays, I had not anticipated the students' overt mention of another rhetorical pattern: *yinyilianjie* 引议联结. *Yin* 引 means to introduce the topic; *yi* 议 to put forward the claim; *lian* 联 to make a real life association, and *jie* 结 to conclude. This pattern surprised me since this was the first time I had learned about it. Previously, no research studies had ever mentioned it. One might then assume it to be a recent rhetorical invention made by Chinese writing teachers in Chinese senior high schools. It was not recorded in official documents or published books,

but seems actually to be folk knowledge circulating these days among high school

teachers and students in some parts of China.

The *yinyilianjie* 引议联结 pattern was indeed mentioned by several participants.

Liyao said:

> 语文老师对议论文的要求不外乎引议联结，引出话题、提出论点、联系
> 实际、收束全文，大体上都是这样，剩下的就看个人的文字功夫了。大
> 学老师还没讲这个，所以我谈谈高中英语老师，她一般要求我们三段式，
> 内容和语文中议论文差不多，只是不强调联系实际这一块。

> Chinese teachers required us to write according to the pattern of *yinyilianjie* 引议
> 联结: introduce the topic, put forward the claim, associate reality and to conclude.
> The rest was all about verbal choices. (For English arguments), college teachers
> did not mention it, but high school teachers asked us to write in three paragraphs.
> The contents were similar to that in Chinese writing, except for the part of
> associate reality. (translation)

Xiameng provided a variation to this pattern, very similar to the original one. She

called this variation pattern *dudianyilianjie* 读点议联结. She said:

> 对于应试作文，我会应用一些老师给的写作指导意见。对于练笔，往往力求
> 自然，不受那些拘束。对于中文议论文，基本的行文思路是：读—点—议—
> 联—结。语文老师教导我们要注重例子和利用例子进行论证的过程。既应有
> 自己鲜明的观点，又应客观些，且联系实际非常重要。至于英文议论文，更
> 注重逻辑的把握，使自己的分析和观点合理化。

> As for writing essays for exams, I will follow the teachers' guidance in writing. If
> it is for practice, I will try to be natural, free from rhetorical restrictions from the
> patterns. For Chinese argumentations, the basic rhetorical pattern is
> *dudianyilianjie* 读点议联结. Chinese teachers taught us to pay attention to
> examples and the process of using examples to justify. It is important to have
> one's own perspectives, and at the same time, it is also important to be objective

or to make a real life association. As for English arguments, to be logic is very important, so is to make the analysis and perspectives justifiable. (Translation)

Here is an example of using this pattern in Chenhong's essay:

Yin 引 (topic introduction)	As one often has to make up another lie to cover a previous one, it is believed that dishonesty is exhausting. Besides, cheating is severely condemned, because it leads to moral taint.
yi 议 (putting forward the claim)	Surely, I don't seek a ground of tolerance towards fraud or corruption. But I am pondering whether it is much too extreme to state that honesty is the best policy at any TIME and in all CASES.
lian 联 (association with real life)	A wise man knows that for everything there is a season and for every activity there is a time. To be honest is also about a choice of time. For example, a Vice Mayer, out of his honest nature, exposing the truth of the soaring price of real estate, got demoted soon after this "deep throat" action. His honesty should be highly respected and any individual with such kind of quality is truly the salt of earth. However, the result is disastrous that the individual suffered, yet the society did not care. Honesty in all cases is unrealistic. An example from my friend may best demonstrate it. He is only six years old but unfortunately he is terminally ill. The doctor told parents that the boy has only six months to live. Now the parents have two choices. A: Hide the truth and spend most of time playing with the son as long as he is happy. B: Tell him that, "Hey, Son, you only have six months to live, you should cherish your life." If honesty is the best policy, the parents are supposed to tell him his doomed destiny. From this real story, we may conclude that honesty is a good policy but it does not work in every case.
jie 结 (conclusion)	In face of the reality, it is high time that we, as mature and responsible men, took a careful and close look at the real situation first while holding this classical proverb in our heart. Is honesty the best policy? It depends.

Rhetorical devices. Besides these authoritative rhetorical patterns, according to the interview data, Chinese writing instruction in high schools or higher education is

composed of rhetorical devices, other rhetorical patterns and linguistic artistic beauty. Rhetorical devices include simile, metaphor, parallelism, paradox, pun, antithesis, anthology, hyperbole, etc. Making use of these devices can make the writing artistic and beautiful to the readers. Xiameng's essay made good use of rhetoric devices as indicated in the essay and appeared appealingly poetic and outstanding for its artistic taste. Here is her essay:

It is widely acknowledged that honesty originated in the continuous probation of truth and in the endless pursuit of sincerity and justice. Winding through **the tide of history**, this great virtue has **withered and thrived**, **suffered and prospered** but it remains, for it is always regarded **as a shining diamond** in personal traits and also an indispensable part of the moral system for the entire human race.	Metaphor Personification Personification Simile
Back in 1970, an emotional kneel-down from Brandt, the PM of Germany, **impressed and moved the whole world**. He held honesty as a holy belief and was courageous to confront his country with the crimes committed by the predecessors, with no denial.	Exaggeration
Honesty is an internal force that motivates us to face straight to our conscience, to the past and history. Brandt undoubtedly set us a good example and taught us a vivid lesson.	
It is honesty that saves us from **the misty world of fame** and disguise and exhibits before us **a paradise of truth and freedom**. It leads us to a wonderful spiritual world where we fill our hearts with comfort, self-esteem and happiness.	Metaphor Metaphor

However, there are still many people, even some social figures, who risk betraying this virtue and eventually grieve and regret.

Richard Nixon once strayed away from **the just path of honesty** for his own political sake and resigned. Bill Clinton brought disgrace on himself for being dishonest in a series of scandals. Their dishonesty, to some extent, thwarted their political career, which could have made them more venerable.   Metaphor

While Barack Obama, frankly admitted having taken drugs in his youth when faced with media exposure. He successfully maintained his honesty and won forgiveness from Americans.
Yes, honesty is the best policy. It is a truth, a life-time doctrine. **Like the northern star**, it   Simile
guides us wherever we are.

Several participants mentioned rhetorical devices in their interviews. Among them, Yaorao responded to the question whether rhetorical devices were taught and also used in the essay as follows:

比喻，拟人，夸张，排比，反问，设问等。用在议论文里，一般说成论证方法，即举例论证,道理论证,对比论证,比喻论证。在我的文章中，以上四种论证方法我都用了。

Metaphor, personification, hyperbole, parallelism, and rhetorical questions, etc. In argumentative essays, the rhetorical devices were called as argumentative methods, such as examples arguments, inferential arguments, contrastive arguments and metaphor arguments. In my articles, all the four mentioned arguments have been utilized. (Translation)

About rhetorical devices, Liyu had more insightful perspectives as cited below:

对于修辞手法，由于阅读的书还是以中文为主，所以了解更多汉语方面的，对于英文的修辞手法就不太了解了，也许我的了解比较片面吧，我觉得其实修辞方法在各个语言中没有太大的区分，因为修辞是超越语言本身的一种艺术，这种艺术在各种语言中是可以有共识的，如果有区别的话，或者是这种语言文字本身带有的可塑性，或者是在民族文化的影响下形成的。比如说中文中的比喻，比拟，夸张，通感，拟声，双关语，借代等在英文中也是通用的，但是英文也有一些特色修辞：讽刺，头韵法等，前者就是民族文化的产物，而后者就是由语言文字本身带有的可塑性形成的。在我的文章中因为语言功底问题在修辞的运用上还不自如，所以用的不多。

As for rhetorical devices, due to what I have been reading is mainly in Chinese, I know many more rhetorical devices in Chinese than in English. Maybe, my knowledge is partial, but I feel that rhetorical devices are not quite different in different languages since rhetoric is actually sort of an art beyond language per se, which can be common in different languages. If difference does exist, the difference is due to the shapability of the language or the impacts of national culture. For example, in Chinese, metaphor, analogy, exaggeration, synesthesia, onomatopoeia, pun and metonymy are also common in English, but in English there are also some unique rhetorical devices, such as sarcasm and alliteration, etc. The former resulted from the national culture and the latter were made out of the shapability of language. In my article, due to my language proficiency, I can't flexibly use the devices, so not many of them were used. (Translation)

However, Wuhan also mentioned that simple styles were also recognized as good writing both in Chinese and English, especially in English. She said:

好的英语作文我觉得不一定需要用多少别人不知道的单词，读起来让人有诗一样的感觉，能让人很清楚的感觉到作者所要表达的感情，内容就可以了。好的中文作文我觉得也是相通的，朴实的文字有时也能留下很深的印象，不过大概因为中文作为母语吧，对于中文作文我还是比较倾向于有华丽词藻修饰的比较好，能让人印象深刻。

A good English composition, I think, is not necessary one that has used many difficult words unknown to others; rather its language should be like a poem, making people sense the writer's emotions and content. A good Chinese composition is the same. Simple words can also leave a deep impression on the readers but maybe due to the fact that Chinese is the mother tongue. I prefer to use gorgeous words to modify and to be more impressive. (Translation)

Rhetorical patterns, in addition to the three patterns illustrated previously—八股文, 起承转合, and 引议联结—also include another one, more widely recognized by the 24 participants in the interviews. This pattern is actually Toulmin's Model of claim, data, and warrant with some modifications, as has been taught in Chinese for several decades though it was not called Toulmin's Model but "three elements in arguments," or *yilunwen de sanyaosu* 议论文的三要素. According to the participants, the model of claim, data, and warrant was illustrated as follows:

Claim. Claim should be enunciated by sub-claims. Claims should be clearly defined, insightful, and closely associated with the contemporary era. For example, Liuqiang offers these comments in his essay, demonstrating the process of using data to justify the claim that honesty is important:

Honesty is important because it is what trust builds on. I have serious doubts that a world without honesty can sustain. Let me shed some light by looking at the bigger picture of how our market works. Millions of transactions happen every day, with only a surprisingly tiny number of breaches. It is remarkable that large numbers of contracts are initially oral, confirmed by a written document only at a later time. Suppose even only a small fraction of outstanding contracts require adjudication, court systems would be overwhelmed. It is remarkable how much trust we have in our business counterparts.

Believe it or not, we bank more on individual integrity than rule of
law. In fact, laws, and regulations, no matter how delicately architected,
will never eradicate wrongdoings. Nothing but honesty works all the time.

Data. Data, according to some participants, should be rich, diversified, objective,

and closely related with real life, including examples, interesting stories, typical facts,

citation of authoritative works such as ancient poems and articles, metaphor, comparison

and contrast and inferential appeals. The diversity in data types has been demonstrated in

student essays. Examples of data types will be given in details below.

Warrant. Meanwhile, warrant in Chinese writing instruction is perceived

differently from the warrant in Toulmin's Model, which, as a noun, refers to the bridge

between claim and data. But, in Chinese writing instruction, warrant is perceived in the

sense of a verb, meaning the methodology to justify the claim with data. It was regarded

as a process of justification.

Several Chinese participants also illustrated the three elements in their interview

responses. About warrant, Liyao said:

议论文要观点深刻，说理要明晰，论证要有力，论据要充分，
引用要恰当，举例要生动、新颖、符合论点。

In argumentative writing, the writer's opinions should be insightful.
Justification should be clear and forceful. Data should be adequate.
Citations should be appropriate. Examples should be vivid, original and in
agreement with the claims. (Translation)

Heji illustrated the process of justification in a more detailed manner by describing the

process from the beginning to the end:

通常在写这种 argumentative 的文章，或者是对于一个普遍被接受的观点提出异议的时候，一定要先找到一个立足点，要有一个有力的辩驳点作为整篇文章的中心。从我个人来看，要组织这样的文章，通常我会将文章分为四个部分，首先第一部分是对传统观点或者大众普遍认可的 point 提出肯定，指出它的合理面。然后第二部分则是话锋一转，可能以一个简练的小例子为证对传统观点提出自己的反面见解，从而亮出自己不同于一般或者他人观点的全新的 point。第三部分则是紧紧问绕我自己的 point 做出 explanation.这个部分通常采用一些例子做扩充，展开来论述我的观点。最后一部分则是总结，总结经常性的是辨证的来看待这个问题，不绝对地否认他人或者是大众的观点，但是更突出和强调自身提出的新的观点的合理性，对文章做出总结。

For argumentative writing, or to challenge a widely accepted opinion, the writer should first identify the position as the thematic focus for the whole essay. Personally, to organize such an article, I will have four parts: in part 1, I will show my positive perspective towards the widely accepted point; in part 2, I will present a new point by providing a negative perspective against the accepted opinion thought giving a little example; in part 3, I will focus upon the new point and elaborate upon it by giving more examples to justify it; in part 4, I summarize by giving two sides of the issue. (Translation)

Some post-hoc textual analysis of the Chinese student compositions supported the interview data. I found that there were clearly defined claims and sub-claims introducing paragraphs with topic sentences and supported by data or appeals following the topic sentences. Take a look at the following essay by Wangwen. It is a good example for this aspect:

With the development of our society, policies are becoming more and more vital to all of us. In my opinion, **honesty is the most important in terms of economic improvement, individual**   **a general claim**

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advancements and harmony of society.

      Economic improvement is important to us and honesty exists in many aspects in economy. We can even say that without honesty, economy can't move forward. Haier is one of the most famous electrical equipments corporations all over the world and its faith is to be honesty. Depending on this faith, Haier consists on producing products in good quality and thanks to that, it sets up a splendid image and is being accepted by the world gradually.   Sub-claim

      Individual advancements also need honesty. Honesty can help us gain acknowledge from public which can help us cultivate interpersonal relationship easily and get success in the future. There's a story about Uncle Honesty Lincoln. Lincoln worked as an assistant in a store to subsidize family expense when he was a teenager. Though he was really poor, he consisted to be honest. For example, he gave back costumers' money which was omitted on his own initiative. Step by step, Lincoln got trust from all neighbors and that help him become a great president in American history.   Sub-claim

      Honesty can also promote the harmony of society. How can we imagine a world without honesty? If so, the world must fill with hypocrisy and deceit. Honesty can strengthen credence between people and build a harmonious atmosphere.   sub-claim

      In conclusion, I think honesty is the most essential policy, not only to ourselves, but also to every corporation and our society.

      Such a phenomenon could possible explain that the mean of scores on claim is the highest among the three means of claim, data, and warrant since Chinese students were taught to write in Chinese with the criteria similar to English argumentative writing that claim should be followed by sub-claims and all the claims should be clearly stated. Data were also categorized into many types, such as social events, personal stories, fable-like stories, rebuttal examples, authoritative quotations, which diversified Chinese students'

use of data in their compositions. Here are the examples identified from Chinese student

essays to illustrate these diversified data types:

Social events:

Example 1 by Liuqiang:

But I am a strong believer that men are born honest. A world full of humbugs doesn't mean we individuals should take them for granted. You define the world, not otherwise. Anyone who thinks that one has to bend to humbugs must think again. Think about it. The pressing issues haunting the world can't be solved but by honest efforts by all human beings. **Global warming issue will be sheltered untouched until the final day of the earth if nations with different immediate concerns still eschew their share of responsibility. Conflicts between nations, especially in Middle East, will never end without sincere talks.**	Social events

Example 2 by Chenhong:

For example, **a Vice Mayer, out of his honest nature, exposing the truth of the soaring price of real estate, got demoted soon after this "deep throat" action**. His honesty should be highly respected and any individual with such kind of quality is truly the salt of earth. However, the result is disastrous that the individual suffered, yet the society did not care.	Social event

Rebuttal Arguments:

Example 1 by Heji:

The greatest writer in the English language and the preeminent
dramatist in the world, William Shakespeare, admonished his
readers that honesty is the best policy, whether for individual,
or for society. For ages we take this thing to be self-evident,
that honesty is richer than any legacy in the world. Each time

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you are honest and conduct yourself with honesty, a success force will drive you toward greater success. **Each time you lie, even with a little white lie, there are strong forces pushing you toward—you may probably suffer from mental pressures**. A successful personage says the supreme beneficial of honesty is that you never have to remember what you have said, which helps you live blissfully. **Unfortunately, in recent years, we see not a few well-known people in trouble because of dishonesty. Reports on false credentials, phony donations and lip-synch ruined their reputation the same as our trust. Honesty may not make you popular, but dishonesty is likely to mislead.**

Rebuttal argument

Rebuttal argument

Example 2 by Wuhan:

Honesty is the best policy if one is to achieve success in his career. **Cheating on exams may get you a decent grade at college, but never in the way you have demeaned your character by acting untruthfully**. **What makes things worse is that once the label of dishonesty is tagged, more often than not it will sadly stick to you and never easily walk away like an indelible stain. The same can be said when it comes to interpersonal relationships. There is nobody who would like to hang around with a dishonest friend, or work with a deceiving colleague, or commit to an unfaithful spouse. Dishonesty tends to spoil a relationship much faster than imagined, and when it takes place, those who used to be attached to you get hurt, leaving behind unspeakable trauma. Besides, the sting of conscience will kill you every morning you wake up and realize that stupid, giant mistake you have made.**

Rebuttal arguments

Authoritative Citations:

Example 1 by Huangshi:

Ayn Rand wrote, **"When you see corruption being rewarded and honesty becoming self-sacrifice, you may know that your society is doomed."**	Authoritative Citation

Example 2 by Xiaokai:

I remember the great philosopher Immanuel Kant once said, **"Honesty is better than any tricks, and moreover, it's the fundamental of all the tricks."** And it is true enough that honesty is the best policy.	Authoritative Citation

Story Telling Arguments:

Example 1 by Zhongwen (The whole essay was telling a story):

It was a winter afternoon; mom finished her work from the construction plant, returned home with her weary body, and asked her son: how was your final exam?

With an airy response, "Of course very excellent", she smiled with a little surprise.

With a rapid complementation, "I guess almost 90 scores", she smiled with wrinkles blooming like a chrysanthemum.

She looked at the thickened palms of her hand, then looked out of the window and thought in her mind: only if my son could study hard, no matter how tough and difficult the life was, I would keep going fearlessly.

She reached into her pocket and went to the market, but the nice dishes were so expensive. After some thinking, she bought half of the roast duck, and spent 15yuan, although she earned only 25yuan a day.

It was supper time; the son persisted in having supper while watching TV. Looking at her son gnawing the drumstick deliciously, she thought it was a wise decision to buy the half roast duck.

One week later, the son took his school report back home, and mom was excited to fetch his report. "65 scores", she said to herself and looked at her son. Disappointment, sadness, there were so many words in her eyes.

She felt regretful, as it was not the first time she was deceived by her son in this way. She looked up into the sky, as if she was seeing her husband in the heaven. Simultaneously, she cried loudly.

At that time, he understood.

Years later, her son was admitted into the Beijing University. He said: I would never break my mom's heart with my dishonesty, as I knew how sad she was when she was deceived by her beloved son.

Example 2 by Wangwen:

Individual advancements also need honesty. Honesty can help us gain acknowledge from public which can help us cultivate interpersonal relationship easily and get success in the future.
There's a story about Uncle Honesty Lincoln. Lincoln worked as an assistant in a store to subsidize family expense when he was a teenager. Though he was really poor, he consisted to be honest. For example, he gave back costumers' money which was omitted on his own initiative. Step by step, Lincoln got trust from all neighbors and that help him become a great president in American history. **Story telling**

Inferential Arguments by Wuhan (The whole essay was doing inferential analysis):

Generally speaking, we can sort all the policies which make differences on people's actions into two categories, inner characters and external rules. More specifically, the former means some principles and qualities we hold, while the latter means rules, policies, laws or something. There's no doubt that the latter is never perfect, always with weakness here and there, negatively waiting for bad-doers to make use of. On the contrary, it's inner characters that get people's evil thoughts eliminated, let alone wicked deeds.

As for inner characters themselves, honesty, compared with all the others is always considered as the best policy to us socialized human beings. Firstly, in the perspective of morality, honesty is highly ranked as principal inner characters. As the issue that constructs the most basic bond in socialization, honesty is highly valued and put emphasis on no matter where. And individually, he or she who is of great honesty is usually considered reliable and respectable in return. Once found to be dishonest,

one will lost others' trust, only left helplessly isolated. Furthermore, to a practical and formal extent, honesty also overweighs the others and plays an irreplaceable role. On the one hand, honesty is obviously looked on as one of the most important factors in law's making, promulgating and executing. Lacking in honesty, law is probably reduced to a mere scrap of paper. On the other hand, it has also been playing a distinguished part in economic activities since commodity economy emerged. As acknowledged, honesty is a firm ground on which producers, merchants as well as customers interact with one another, adjusting and guiding their behaviors. That is to say, social economy tends to get suppressed and even paralyzed without honesty.

   To draw a conclusion, compared with all the other factors, importance of honesty can never be overestimated as the best policy, no matter to the society or individuals. Dishonesty kills reliability and flourishes chaos, jealousy and nasty, making our life and the society out of order and into shadow. Only with acceptance and observance to the status of honesty, can we make sufficient preparations to create our future, and possibly a good one.

The diversity of data types in Chinese students' argumentative rhetoric contradicted the Chinese conventional attitude towards evidence or data, as stated in Chapter 3 under the section of differences in rhetorical structures. Kaplan (2001) cited Xiaoming Li that evidence for a long time was regarded as elusive in Chinese rhetorical conventions. From the textual and interview data analysis, I found that the data types used in Chinese student essays and taught in Chinese writing classrooms were so diversified and specified that they were no longer elusive to Chinese college students. If we draw upon the lens of Nisbett's folk metaphysics (beliefs about the nature of the social and physical world, Nisbett, 2003, p. 35) to observe the phenomenon that the data types in Chinese student essays were more diversified and

socially connected than their U.S. peers, as shown by previous examples in this

section we may find that the use of data types can be to some extent interpreted by

contrasting Chinese and Greek folk metaphysics:

> The Chinese were attending closely to the social world. The sense that the self was linked in a network of relationships and social obligations might have made it natural to view the world in general as continuous and composed of substances rather than discrete and consisting of distinct objects. Causality would be seen as being located in the field or in the relation between the object and the field….But the Greeks had the luxury of attending to objects, including other people and their own goals with respect to them, without overly constrained by their relations with other people. (Nisbett, 2003, p. 36)

This paragraph shed light upon the western and eastern different perception

about causality. From the eastern perspective, causality was supposed to be located in

the social environment the event or object was in; from the western perspective,

causality should be approached with respect to the event or object per se. Therefore, it

was stated that for westerners, life is simple and controllable; for easterners, just the

opposite: life is complex and uncontrollable. Maybe, this can partially explain why

Chinese students can accept the instruction in writing that data should be located from

their social life and are ready to use them to support their claims; however, U.S.

students may be unwilling to accept such a notion and prefer to use their own feelings

to support their claims. In this sense, we may infer that students' cultural sub-

consciousness may be related with their preference or readiness for knowledge. In

other words, if the knowledge is congruent to their cultural conventions the students

were rooted in, they are ready to acquire it; on the contrary, they may not be ready for

the acquisition of the knowledge. Though all the seven U.S. participants said that they

were not taught Toulmin's Model of claim, data, and warrant, it is possible that they simply forgot such being taught in their high school classroom, possibly due to the supposition that the knowledge is contradictory to their cultural expectation.

Nevertheless, as for data in Chinese student argumentative essays, we can also employ another thinking pattern: contextualized thought process, characterized by eastern habits of thoughts, and then we may feel that to make such a judgment that data was no longer elusive to Chinese college students seemed to be partial. "Data or evidence" can be translated into three Chinese phrases in three different contexts:

- In the argumentative essays, it is translated as *lunju* 论据；

- in a legal case, it is translated as *zhengju* 证据；

- in a research context, it is translated as *shuju* 数据.

In this study of argumentative essays, "data or evidence" should be understood as in the first context. In other words, in the context of argumentation, the concept of data or evidence was no longer elusive, but in the context of research when it is understood as *shuju* 数据, it is since it is doubtful that certain types of data may enable people to make any accurate decontextualized conclusions.

Findings from U.S. Students

Variations of the 5-paragraph essay pattern. Though scores of data on Chinese

student essays were greater than those of their U.S. peers, warrant is not so clearly

presented in the paragraphs since it was regarded as the justification process instead of

some sentences of rules or principles in Chinese writing instruction. Within the

quantitative data, I also found that the mean of scores on warrant is the lowest among the

three. Compared with U.S. students' compositions, Chinese students' means of the scores

on three elements were all higher at face value with the mean of scores on data in

Chinese students' data is even significantly higher than that of their U.S. peers. The

reason for the differences may be implied through interview data from U.S. participants.

No U.S. participant reported ever learning about Toulmin's model — not in any formal

classroom, not really in any setting whatsoever. As a result, no U.S. subjects indicated

that they knew what claim, data, or warrant was. The rhetorical pattern they were taught

was "the 5-paragraph essay." Perceptions concerning this pattern varied among the

informants. In summary, the pattern was synthesized from participants' illustrations in

the interviews into three sub-patterns as listed:

Sub-pattern 1 suggested by Sana:

Introduction

Example 1

Example 2

Example 3

Conclusion

Sub-pattern 2 suggested by Sus:

<div align="center">

Introduction

Example 1

Example 2

The counter-argument

Conclusion

</div>

Sub-pattern 3 suggested by Jun:

<div align="center">

Introduction with a general argument (claim)

Argument (sub-claim) with supporting details

Argument (sub-claim) with supporting details

The counter-argument

Conclusion

</div>

In the above three sub-patterns, counter-arguments appeared in two of them, reminding me of Hegel's anti-thesis. As a matter of fact, sub-pattern 3 demonstrated a similar Hegel's dialectic: thesis, anti-thesis, and synthesis. When such a pattern is used to deal with topics about human relationship, it is quite similar to Chinese rhetorical structures of contextualized compromise, which will not take sides to accept or reject any proposition but make it a contextualized case. One thing worth mentioning is that when

Hegel's dialectic is used to deal with a topic about human relationship, it is no longer dialectic since the denotation of the concept changed.

By exploring research literature, I found that argumentation, regarded as a principal way to improve students' problem solving skills in U.S. higher education, has been regularly researched upon and substantially discussed in the literature concerning students' skills in solving problems in difference disciplines, such as law education, science, engineering, economics and education, and so forth. As explained in the literature review section, there are two approaches to teaching argumentation skills: direct instruction and indirect instruction. Direct instruction hasn't shown consistent positive results, as one might expect. Some research found direct instruction effective to enhance argumentation skills (Sanders et al. 1994), while other research indicated no significant positive effects for direct instruction on improving argumentation skills (Knudson, 1991). Some research has contributed some detailed findings to shed light upon the effectiveness of indirect instruction on argumentation by conducting some collaborative tasks and/or by technological support (Oh & Jonassen, 2006). Indirect instruction makes used of scaffolds along with some cognitive tools in facilitating students' collaborative problem solving. Scaffolds refer to the conceptual frameworks that constrain students' problem solving processes within certain expected tracks. One of the major scaffolding frameworks is constructed by applying Toulmin's Model. It is constructed by associating claims, evidence, warrants, illustrated as (a) hypothesis, (b) data, (c) principles, and (d) unspecified; and three links: (a) *for*, (b) *against*, and (c) *and* (Suthers, 1998). Students were asked to use this framework in their collaborative discussion about solving problems. Research (e.g., Cho & Jonassen, 2002) found that, with this approach, students

can generate efficiently coherent and more extensive arguments. In other words, students' skills in producing more cogent arguments and solving problems of different types can be honed. More encouraging are the skills that can be transferred to individual problem solving skills (Cho & Jonassen, 2002). Unfortunately, according to the U.S. participants in this study, none of them have ever received guidance regarding such argumentation instructions.

Schematic Differences: Thinking Patterns

Another cultural difference in writing lies in the schematic macro-structural patterns in students' essays, demonstrating cultural differences in ways of dealing with specific topics. The thinking patterns in Chinese student essays were suggested by the Chinese writing teachers, which appear to be so well-established as to be authoritative and common to the essays, while in U.S. student essays, no such conceptual framework could be recognized.

Chinese students. The influence of culture on students' writing has been theorized by contrastive rhetoric. One of the participants, Heji agreed that it was unavoidable for Chinese students to write English essays with Chinese cultural traces or impacts.

> 中国文化对于英语写作的影响？这个必然是有的，中国
> 文化如此深厚，它所在我们身上产生的烙印，对我们思想、人
> 生观、价值观的影响必将在我们的英语写作中有所体现。而且，
> 通常我们在英语写作中运用的例子也来自于我们的传统文化中，
> 像对于古代名人名言的引用，对于古代诗歌的引用等等，都体

现着中国文化对于英文写作的影响。另外，中国文化熏陶之下的思维方式对于我们英文写作也有深刻影响。我看过一些比较有名的英文文章，我觉得他们写作的时候非常自由，很多文章，你可能找不到一条清晰的主线，但是中国的学生写的文章，可能是受汉语教学或者当代的英语教学的影响，常常就是"总-分-总"这种定式。

Does Chinese culture have impacts on English writing? Of course. Such substantial Chinese culture and its impacts on our minds, ideology, view of life and values will be represented in our English writing. Additionally, usually the examples used in our English writing are from our traditional life, such as citation of ancient maxims, poems. All of these show to us that Chinese culture has impacts on our English writing. What's more, thinking patterns influenced by Chinese culture have deep impacts on our English writing. I have read some famous English articles. I felt that freedom of minds enjoyed by the writers when they were writing. From many English articles, probably, you can't find the main well-defined clue, but English writing by Chinese students followed the pattern of "general-specific-general", probably influenced by Chinese instruction or the current English teaching. (Translation)

Several participants claimed that thinking patterns were one of the important factors associated with Chinese students' English writing. Heji identified English thinking patterns to be the most difficult for him to learn in English writing. He stated that he could write sentences in correct English grammar, but the sentences may not follow English thinking patterns, which made the sentences awkward to read. Another participant said that he realized when he was writing English compositions, he was using English to express his Chinese thinking patterns:

其实我只是在用不同的语言来表达同样的思想。但是我感觉到了，英美人思维同我们的差异，而这些差异会导致我们用这种语言来表达另一种思维时显得很不好组织并且时常言不达意，就像器

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官移植的排斥反应一样。比方说，美国人说话直白，用词很直接地、鲜明地、准确地表达出其感受，但是中文则不一样，要委婉而且时常要绕很大一个圈子来表达。倘若用英语来绕这样的圈子，就感觉给表达带来了莫大的困难。所以说感觉还是在用相关语言的时候尽量要转换思维。

As a matter of fact, I am using different languages to express the same [Chinese thinking patterns]. But I realized that English speaking people think differently from us, which made it hard for us (Chinese) to organize the language or unable to deliver meanings appropriately, just like the reaction in organ transplantation. For instance, Americans speak in a straightforward way, expressing themselves directly, clearly and precisely, but Chinese is different, which tends to use polite and indirect ways to deliver meaning. If English is used to express such politeness and indirectness, meaning can't be delivered smoothly. So it is important to shift thinking patterns in using the language (English). (Translation)

The participant's remarks are in alignment with the statement that English thinking pattern is linear while Chinese thinking pattern is circular. There is some truth in his remarks, at least concerning argumentations. In English argumentations, the pattern of claim, data, and warrant is linear, as in Aristotle's syllogism, while Chinese rhetorical patterns, such as eight-legged essays, or the modifications of the four-part rhetorical patterns, such as *qichengzhuanhe* 起承转合, or *yinyilianjie* 引议联结 are not linear.

U.S. Students. Most U.S. student essays didn't demonstrate any other recognizable pattern but rather a linear flow of ideas. The writers followed their own ways of thinking and presented a linear flow of personal feelings, making their writing smooth to read. The readers needn't go back and forth to identify any circular or complex pattern. Their meanings were just delivered as self-evident and direct. Paragraphs were

not necessary and also difficult to be formulated in the natural linear flow of ideas since thoughts or ideas just wouldn't be stopped and gathered together to formulate a block of a paragraph.

I made the conclusion above before I realized the importance of knowledge about rhetorical patterns since, from the literature review, I didn't find the rhetorical patterns possibly observed by U.S. college students at present. Aristotelian syllogism and Hegelian dialectic had been antique and unable to work as guiding patterns for the contemporary college students. But then a question emerged: What patterns are U.S. students using in their essays? I decided to look at the patterns in their essays, especially given their mention of 5-paragraph essay patterns. I obtained the following table of results:

Number of Paragraphs	1	2	3	4	5
Number of Compositions	6	4	11	8	1

Thus, there was only one student writing in 5 paragraphs, and she was a Chinese Vietnamese student who came to U.S. when she was 5 years old and had been educated in U.S. since then. Thus, this 5-paragraph essay pattern couldn't be used as the analytical lens. After this, I had a look at the 4-paragraph group, and I came to find some similar pattern of *qichengzhuanhe* 起承转合. The idea occurred to me that such a rhetorical

pattern was representative in both cultures though it was not given an official designation in U.S. Such evidence showed to us the representativeness of such a pattern. It is not just a pattern unique to Chinese culture, but some core knowledge about the rhetorical

patterns in arguments. The difference seems to lie in different attitudes towards the knowledge: Chinese culture authorizing it as official knowledge while U.S. culture lets it grow on its own. Even though we have similar rhetorical patterns in U.S. students' essays, they were not widely used compared with the situation in Chinese student essays. As some naturally formulated pattern, it couldn't revise the linearity of the western thinking pattern.

Small Culture: Personal Culture

Chinese students. Personal culture has not been recognized by Chinese participants as related with their English writing though it is a component of Atkinson's cultural model (2004) and personal experiences were considered to be one of the factors related with Xiaoye You's (2010) English composition, who recognized personal experiences as one of the important factors for his English composition in addition to social and political discourses. Personal professional and academic cultures haven't either. However, from student compositions in both Chinese and U.S. groups, I found that students tend to associate their reasoning with their academic background. One Chinese student, Heji, specialized in law, so he talked about the topic in the context of law. Another Chinese student, Lixiu, is a major in journalism. He said that his writing would follow the rules related with journalism.

U.S. students. Most of the U.S. students were student in Education, specifically taking courses in the Department of Teaching and Learning, so their data were heavily related with education and classroom student behaviors. A couple of U.S. students'

English compositions were more like a monologue, heavily relating the writing with their own personal experiences, which the researcher would like to regard as personal culture while in Chinese students' compositions, any line showing the writers' own personal experiences and beliefs could not be found. Possibly, this can also be associated with the binary opposition of collectivism and individualism. Actually, in most U.S. students' compositions, the researcher could find heavy descriptions of self feelings with an exception of four students who talked about social events, rather than personal feelings or experiences. Here is one example essay, written by Sana, showing heavy descriptions of self feelings:

> Is honesty really the best policy? Is it even possible to be a hundred percent honest all the time? I believe that we can't be honest all the time. We let our feelings contradict honesty. This is when we lie about how someone looks when they ask or something deeper like lying about cheating. We don't want to hurt someone else's feelings. Psychologically, some people get a euphoric feeling of making someone feel great about themselves or their accomplishment. We also feel better about ourselves when we make someone feel better after being upset.

Sana tried to persuade readers of the importance of being honest by referring to feelings involved in honest interpersonal communication as follows:

> We always claim to want to the truth and nothing but the truth. We fight, argue, kick and scream for it because we feel "honesty is the best policy", but is that accurate? Is honesty truly always the best policy? Personally I feel that telling a white lie in order to avoid hurting someone's feelings is justifiable.

Here is Rose's essay that stresses the importance of honesty in arousing positive feelings in human interaction:

> I completely agree with this statement because I feel being honest is what makes someone a better person. An honest person is someone who speaks the truth and does not feel they have to lie in order to get their point

across. Making up stories makes things worse for the person committing the lie. Sometimes the lie comes out the wrong way which misleads the person listening and they begin to not believe you. An honest person is an honest friend. They do not lie to their friends to make themselves look good, or to make their friends feel bad. A true friend would never lie to their friend or collegues because they value friendship and the bond of trust that friendship is based upon. An honest person most definitely does not lie to their spouse. They do not sneak around behind their backs or cheat.

The worst thing that can happen is when one person figures out that their friend or spouse has lied to them and they feel hurt. They feel like they have been deceived, because they a person they cared about would do such a thing. What happens then is the person loses trust for the betrayer. The relationship suffers, and the person begins to doubt what their friend or spouse says to them because they fear that they will be lied to again. At most times, once a person lies, they will always lie. It is a bad habit that takes much effort to break. Honesty most importantly builds respect amongst people. Many times, students have to be formed in groups and they must trust their partners. If a partners lies and does not get the assignment done, their group members will not believe they will complete the next assignment given. Therefore, they will do the work themselves and take full credit. If a person lies and says they studied for a test and they fail, which makes them look like a liar. This is why I strongly believe honesty is the best policy.

In order to be persuasive, U.S. students tried to arouse readers' empathy by talking about the positive feelings of being honest and the negative feelings of being dishonest. Their essays read as if the arguments were conducted closely between the writer and the reader personally face to face, in contrast to Chinese students' arguments based upon the social value of being honest, which sounds more public instead of personal. This may have accounted for the significant difference in terms of frequencies of pronominal reference between two groups' essays ($p = .07$). U.S. students utilized more cohesive devices of pronominal reference than their Chinese peers. Drawing upon the lens of research findings in cross-cultural cognitive studies, I can interpret the

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difference in pronominal reference according to philosophical assumptions about the worldviews held by easterners and westerners and their correspondent cognitive differences in terms of attention and perception (Nisbett, 2003).

Nisbett (2003) found that easterners considered the world as complex, composed of interdependent elements, which had to rely upon their environments. With such a world view, he writes, easterners tend to attend more to environmental factors while westerners tend to attend more to independent objects, human beings, or events. He also gave an example which was a true event that happened in the U.S. A Chinese graduate committed a crime in the U.S. Reports about this crime were found in the U.S. and China. Nisbett, with the help of his Chinese graduate students, found that western reporters tended to blame the criminal himself about his bad dispositions while in China more fault was found with the environment in which the criminal was brought up. The difference in attention patterns may result in the rhetorical difference that easterners may depend upon external environmental factors to support the claim while westerns may pay more attention to the individual in question. Concerning this respect, Nisbett (2003) stated: "North Americans were more likely than Asians to reproduce the scene from their original point of view, looking outward. Asians were more likely to imagine the scene as an observer might, describing it from a third-person perspective" (p. 88). Possibly, that's why U.S. students used more pronominal reference and fewer data types than their Chinese peers, besides other possible factors.

Summary of Cultural Factors

In summary of the illustrations in this section, I found that the cultural factors including national culture, classroom culture, personal culture and professional or academic culture identified by Atkinson (2004) are associated to some extent with some of the 16 variables generated from synthesizing five linguistic theories. A conceptual model of argumentative coherence associated with cultural factors is built to demonstrate the association as follows:
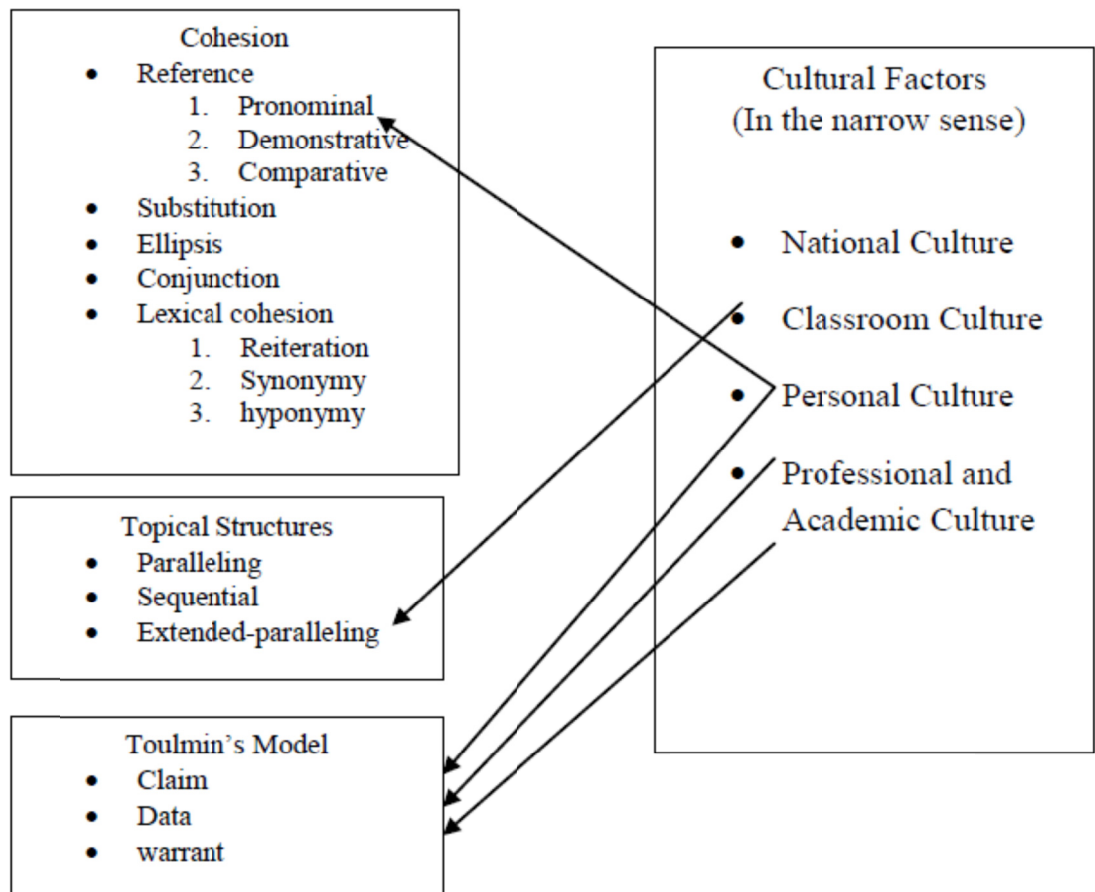
Figure 9. A Conceptual Model of Argumentative Coherence Associated with Cultural Factors.

Rhetorical Factors

Information about rhetorical features in Chinese and U.S. College student essays has been provided in the previous section of cultural factors to support the contrastive cultural ideology designated as collectivism and individualism. In this section, these rhetorical features will be discussed in a direct cross-cultural mode in order to shed light upon the rhetorical association with coherence in Chinese and U.S. college student essays.

As discussed in the previous section, Chinese students tended to adopt well-established rhetorical patterns to framework their conceptualization in the essays while U.S. students had been freed from the conventional rhetorical restrictions and just let their own feelings flow along with the verbal lines in their essays. Such contrastive features result in contrastive coherence patterns in essays by two groups of students respectively. On the whole, this section is composed of two parts: Part 1 is the elaboration of rhetorical features in Chinese student essays including the corresponding rhetorical association with coherence manifested in essays by Chinese students; Part 2 is the discussion of rhetorical and coherence features in U.S. student essays.

Chinese Students

Chinese rhetorical conventions seemed to be associated with the significant coherence differences between the two groups' essays. As found in the previous part, identified by interview participants were such rhetorical patterns as the modified versions

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of rhetorical conventions such as eight-legged essays *baguwen* 八股文 or

qichengzhuanhe 起承转合. However, the eight-legged rhetorical pattern was modified to

be composed of claim, sub-claims, and supporting examples. Another similar rhetorical

pattern was called *yinyilianjie* 引议联结. Liyao briefly explained this rhetorical pattern

taught in high school Chinese and English writing and the difference in the application in

Chinese and English writing respectively:

> 语文老师对议论文的要求不外乎引议联结，引出话题、提出论点、联系实际、收束全文，大体上都是这样，剩下的就看个人的文字功夫了。大学老师还没讲这个，所以我谈谈高中英语老师，她一般要求我们三段式，内容和语文中议论文差不多，只是不强调联系实际这一块。

> Chinese teachers asked us to write argumentative essays according to the pattern of *yinyilianjie* 引议联结: *yin* 引: to put forward the topic; *yi* 议: to list the claims or arguments; *lian* 联: to associate the reality; and *jie* 结 to conclude. The rest will be all dependent upon our language proficiency. College teachers havent taught us about this, so let me talk about the way we were taught to write in English in high schools: usually we were taught to write in three paragraphs, similar to the Chinese argumentative writing, but differed in that we didn't need to associate the reality. (Translation)

Heji mentioned his rhetorical pattern in his composition, which is also a four-part pattern, quite similar to *yinyilianjie* 引议联结, but he didn't refer to it as *yinyilianjie* 引议联结. He illustrated his pattern as follows:

通常在写这种 argumentative 的文章，或者是对于一个普遍被接受的观点提出异议的时候，一定要先找到一个立足点，要有一个有力的辩驳点作为整篇文章的中心。从我个人来看，要组织这样的文章，通常我会将文章分为四个部分，首先第一部分是对传统观点或者大众普遍认可的 point 提出肯定，指出它的合理面。然后第二部分则是话锋一转，可能以一个简练的小例子为证对传统观点提出自己的反面见解，从而亮出自己不同于一般或者他人观点的全新的 point。第三部分则是紧紧问绕我自己的 point 做出 explanation.这个部分通常采用一些例子做扩充，展开来论述我的观点。最后一部分则是总结，总结经常性的是辨证的来看待这个问题，不绝对地否认他人或者是大众的观点，但是更突出和强调自身提出的新的观点的合理性，对文章做出总结。

Usually, when I wrote an argumentative essay, or question a well-established opinion, I would first locate a standpoint, or a point to refute as the center of the composition. Personally, in order to organize such an article, I will have four parts. In the first part, I will state how reasonable the well-established opinion is (*yin* 引); in the second part, I will use an example as the data to refute the opinion and present my own original point (*yi* 议); in the third part, I will elaborate upon my point (*lian* 联); in the fourth part, I will conclude to show my dialectical viewpoints towards the issue, meaning not to absolutely refute the universal opinion, but at the same time stress that my point is also reasonable (*jie* 结). (Translation)

In the interview data, Chinese participants mentioned several rhetorical patterns, resembling the modifications of the four-part pattern of *qichengzhuanhe* 起承转合.

Whatever names Chinese students used to call the pattern, seemingly they wrote essays according to different choices of rhetorical patterns to achieve their purpose of persuasion.

These patterns help Chinese students organize their writing into related logical paragraphs, which may also account for the fact that Chinese students don't feel it is so hard to manage the structure of their writing. One Chinese interview participant, Heji, he related this with the difference in thinking patterns. He said:

> 中国文化对于英语写作的影响？这个必然是有的，中国文化如此深厚，它所在我们身上产生的烙印，对我们思想、人生观、价值观的影响必将在我们的英语写作中有所体现。而且，通常我们在英语写作中运用的例子也来自于我们的传统文化中，像对于古代名人名言的引用，对于古代诗歌的引用等等，都体现着中国文化对于英文写作的影响。另外，中国文化熏陶之下的思维方式对于我们英文写作也有深刻影响。我看过一些比较有名的英文文章，我觉得他们写作的时候非常自由，很多文章，你可能找不到一条清晰的主线，但是中国的学生写的文章，可能是受汉语教学或者当代的英语教学的影响，常常就是"总-分-总"这种定式。

> Does Chinese culture have impacts on English writing? Of course. Such substantial Chinese culture and its impacts on our minds, ideology, view of life and values will be represented in our English writing. Additionally, usually the examples used in our English writing are from our traditional life, such as citation of ancient maxims, poems. All of these show to us that Chinese culture has impacts on our English writing. What's more, thinking patterns influenced by Chinese culture have deep impacts on our English writing. I have read some famous English articles. I felt that freedom of minds enjoyed by the writers when they were writing. From many

English articles, probably, you can't find the main well-defined clue, but English writing by Chinese students followed the pattern of "general-specific-general", probably influenced by Chinese instruction or the current English teaching. (Translation)

Heji thought that it was due to different thinking patterns that Chinese students were always presenting their compositions in a fixed pattern while some English writers' articles looked more flexible in terms of structures. Since thinking patterns are actually rhetorical patterns in the writing, what the participant said is that rhetorical patterns or thinking patterns are associated with the macro structures of students' compositions.

According to the quantitative data, the proportion of extended paralleling progression in Chinese students' compositions was significantly higher than that in their U.S. peers' essays. Possibly, such was due to rhetorical patterns in Chinese students' compositions whose rhetorical patterns are structural framework constructed by extended paralleling progression, which assembles the structure mentioned by one Chinese participant, Heji, *zongfenzong* 总-分-总 (general-specific-general), or illustrated as the following scheme:

```
A
   B
    C
      D
          …
A
```

Here is an example of using this scheme, written by Wangwen, as cited before:

zong 总 (general)	With the development of our society, policies are becoming more and more vital to all of us. In my opinion, **honesty is the most important in terms of economic improvement, individual advancements and harmony of society (a general claim)**.

fen 分 (specific)	**Economic improvement is important to us and honesty exists in many aspects in economy** (Sub-claim). We can even say that without honesty, economy can't move forward. Haier is one of the most famous electrical equipments corporations all over the world and its faith is to be honesty. Depending on this faith, Haier consists on producing products in good quality and thanks to that, it sets up a splendid image and is being accepted by the world gradually.
	Individual advancements also need honesty. Honesty can help us gain acknowledge from public which can help us cultivate interpersonal relationship easily and get success in the future (Sub-claim). There's a story about Uncle Honesty Lincoln. Lincoln worked as an assistant in a store to subsidize family expense when he was a teenager. Though he was really poor, he consisted to be honest. For example, he gave back costumers' money which was omitted on his own initiative. Step by step, Lincoln got trust from all neighbors and that help him become a great president in American history.
	Honesty can also promote the harmony of society (sub-claim). How can we imagine a world without honesty? If so, the world must fill with hypocrisy and deceit. Honesty can strengthen credence between people and build a harmonious atmosphere.
zong 总 (general)	In conclusion, I think honesty is the most essential policy, not only to ourselves, but also to every corporation and our society.

This scheme presents one extended paralleling progression. There are more such types of progression in Chinese students' argumentations than their U.S. peers, according to the results of Hotelling t-test. These may also explain why there are more cohesive devices of reiteration in Chinese students' compositions than other devices like ellipsis, substitution, or hyponymy.

U.S. Students

As mentioned in the section concerning cultural factors, U.S. students also applied the rhetorical pattern similar to *qichengzhuanhe* 起承转合. I found three such writers

among the 30 participants. One was a German-origin mother of 3 children, coming back to school after 18 years of interruption, another was the mother of a straight "A" college student, the third one was a regular young college student. Here is an example of such a composition written by the mother of a straight "A" college student:

qi 起   Honesty *is* the best policy, I believe; except in a handful of extreme circumstances. Unless you are a person who is void of emotion; cheating, lying and otherwise being dishonest, will ultimately eat away at you and you will feel like a huge weight is being carried on your shoulders. Even if the dishonesty is never found out, you will always feel as though someone *does* know and you will never be able to rest because you will always be expecting the other shoe to drop at any moment.

zhuan 转   Then there are those handful of exceptions that are what I would call, *judgment calls*. If by telling the truth or revealing a secret you would be causing great suffering for someone, this would be the *"honesty crossroads"*. While telling that truth or keeping that secret would be the morally right thing to do, it may be the lesser of two evils to protect the feelings and stability of that person. They may even tell you that they wished you had not been so honest because the pain of the truth is greater than not knowing at all.

he 合   I believe that there is not a person alive that could say they have *never* been dishonest. As children, we have all tried to hide the truth from our parents. As parents, we have all hidden the truth from our children on occasion; from telling them that Santa Clause brings them presents on Christmas Eve, to attempting to protect their feelings with little white lies but in the end, yes, honesty *is* the best policy.

The rhetorical pattern *zongfenzong* 总-分-总 (general-specific-general) was

mentioned by Chinese participants who recognized it as western. I found two examples

from the three-paragraph group of U.S. students. Here is one of the two:

zong 总
general

It is frequently said that honesty is the best policy, and most people would hold that to be true. It is said to be a good character trait and a quality to seek out in a friend or significant other. Honesty is considered a virtue and young and old, alike, are heralded for their honesty, integrity and trustworthiness. Why does the American culture, the American people and, for the most part, the human conscious consider honesty to be the best policy?

fen 分
specific

To be sly I'll quote a professor of mine who says to, "Always tell the truth so that you won't have to remember what you said." It might be a little smart-alecky to quote in a paper, but it is one of the most vital reasons that honesty is the best policy. If you always tell the truth, you don't need to remember what you have said and don't need to cover up the lies you have already told with new lies. Besides the need to create more lies, as people uncover your lies they form an opinion of you as a dishonest and non-trustworthy person and do not desire to form a closer relationship with you. Honesty cultivates authentic connections because being honest shows courage, maturity and that you care. If you are deceitful and insincere with those whom you say you care about they will frequently feel that you are not to be trusted in any matter because you cannot be honest in small matters with those who you claim are most important to you. It is not always easy to be honest and truthful and perhaps it will cause pain or strain on a relationship, but they will know that you are genuine and heartfelt and if they too are courageous and mature they will know that you were honest with them, value your sincerity and work to make your relationship better.

zong 总
general

Honesty is, indeed, the best policy because it allows you to be considered a honest and genuine person and attract similar people into your life, strengthen relationships with those closest to you, and cultivate your own courage, maturity and character. It is not always easy, but it is always the best decision you can make. Plus, this way you don't have to remember what you have already said.

Though I found similar rhetorical patterns in Chinese and U.S. student essays:

qichengzhuanhe 起承转合 and *zongfenzong* 总-分-总 (general-specific-general) were

recognized, differences still existed due to the fact that in Chinese culture, the patterns

had gained power by being authorized so that they were more pervasively applied in

student writing. The two patterns' association with the 16 variables concerning

argumentative coherence can be demonstrated with a conceptual model demonstrating the

relationship between rhetorical factors and the three indices of coherence as follows:
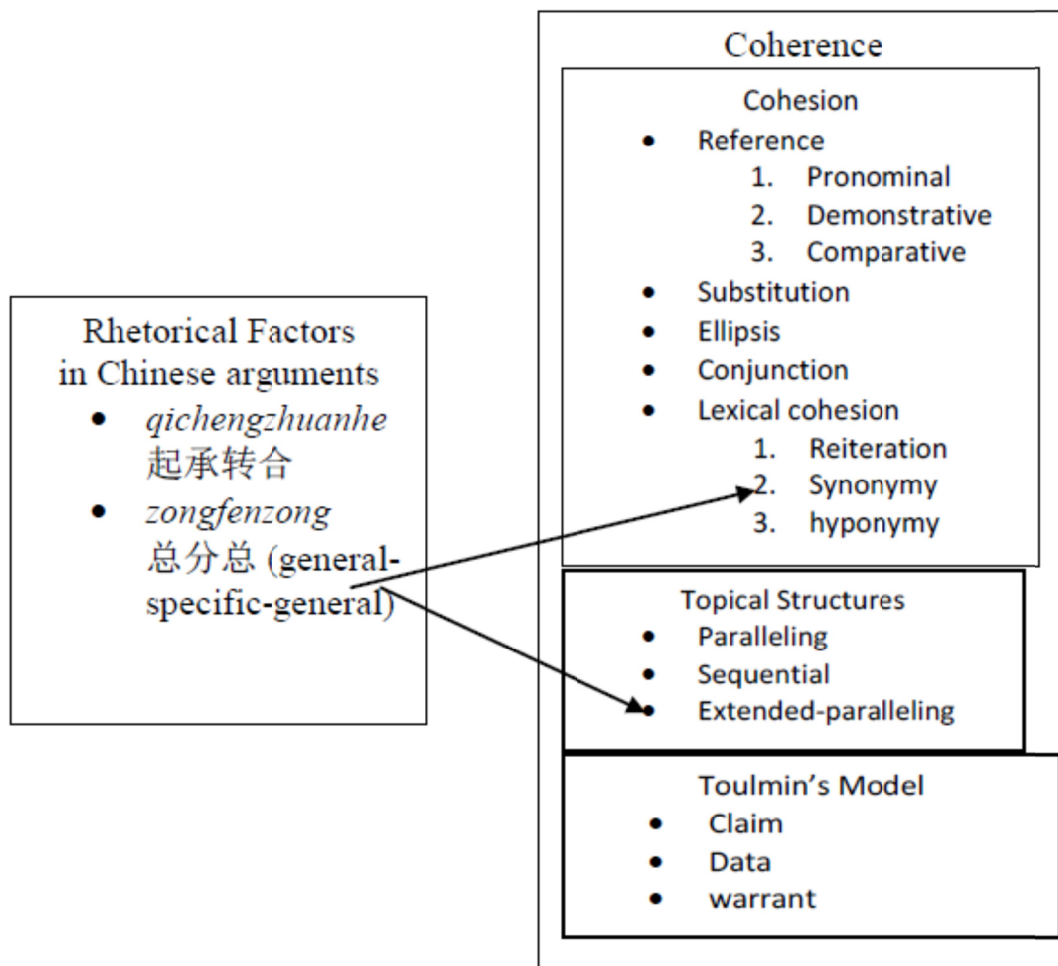
Figure 10. A Conceptual Model of Argumentative Coherence Associated with Rhetorical Factors.

<h3 style="text-align:center">Linguistic Factors</h3>

Linguistic factors can mainly be inferred from quantitative data analysis of cohesive devices, which indicated that there was significant difference concerning pronominal reference, conjunction, substitution and synonymy. In this section, the factors associated with the findings are explored by analyzing interview data and reviewing previous relevant studies. The factors are elaborated upon as they are relevant to the four types of significant difference regarding pronominal reference, conjunction, substitution and synonymy.

Pronominal Reference

Linguistic factors associated with Chinese students' English writing were examined by Lee (2003) in his study of Chinese students' English narrative writing. Lee found that Chinese students didn't use as many as anaphoric pronouns as their U.S. peers. He associated this phenomenon with Chinese linguistics, in which the use of anaphoric pronouns is far less common than in English. Thus, such may be a possible factor resulting in fewer frequencies of pronominal reference in Chinese student compositions than those of their U.S. peers.

Another linguistic feature has been mentioned in the part of cultural factors as one

Chinese participant, Qianhao, thought that it was difficult for him to write English

compositions with culturally loaded set phrases since they did not exist in Chinese. He

said:

我一直很想在自己的英文写作中更好地融入文化因素。中英文的写作差异在文化上体现得特别明显，例如"他是个穷光蛋"可以写成 He is a poor wretch. 但还可以说出 He is as poor as a church mouse. 后者体现的就是一种文化。

I have been thinking of embedding more cultural elements into my English writing. The cultural difference in Chinese and English writing is so obvious. For example, "he is very poor" can be translated into English as "He is a poor wretch" or can be translated as "He is as poor as a church mouse". The latter one is culturally loaded. (Translation)

Indeed, since language is the representation of the culture in which the language is

used, when cultural objects or phenomena are different, the language used to represent it

may be different. In Chinese culture, the place to do religious activities is most often

called "temples," while in English such may be negotiated around words such as "church,"

"mosque," as well as "temples" Therefore, the connotations delivered to an English

reader could be subtly different from those to a Chinese reader. Another set phrase, as fit

as a fiddle, has caused similar confusion to me, and I guess to other Chinese English

learners. How can "fiddle" be associated with fitness? It may be difficult to build up the

association between these two concepts for a Chinese English learner.

Conjunction

According to the interview data, Chinese participants, when asked about their difficulties in English writing associated with linguistic factors, often said knowing in what context what words were appropriate was difficult. This issue partly accounted for the difficulties they had in expressing themselves freely in the English writing. Among linguistic factors, one prominent fact concerning Chinese linguistics and English linguistics is that these two languages are far more different from each other than other alphabetic languages like German, French, and Spanish from English due to geographic and cultural closeness. Therefore, Chinese students' attempts to use new grammatical and lexical devices to deliver meaning in English pose numerous challenges. Liuqiang stated that he found it difficult to translate some Chinese sentence patterns into English because Chinese syntax was different from the English syntax. Chinese syntax could be loose, meaning that linguistic units were connected with each other by abstract logic not by formal cohesive devices as the English syntax. For example, some co-relational conjunctives can be omitted in Chinese when it is necessary in English as in the following sentence:

今天的天气不好，我们的郊游只好取消。

The English translation is:

Since the weather is not fine, we decided to cancel our outing.

There are no causal conjunctives in the Chinese sentence demonstrating that the former clause is the cause of the latter. In English, in order to indicate the relationship between two clauses, a conjunctive "since" is required. Some major differences in this respect

have been summarized by Lin (2000), as cited in Chapter III. This difficulty may possibly

impact the coherent quality of Chinese student English compositions.

According to the results of the Hotelling t-tests in this study, there was a

significant difference between Chinese compositions and their U.S. peers in terms of

conjunctions. The lower frequency of conjunctions in Chinese students' compositions

may support the assumed difference in terms of syntax. Whether Chinese students feel

difficult to acquire conjunctions or not cannot be supported since not a single student out

of the 24 participants mentioned that. To sum up, lack of frequency of conjunctions in

Chinese language possible explains the significant difference. In other words, the

comments from Chinese students correspond to the quantitative results.

Substitution

As the previous two items illustrated, substitution is another grammatical cohesive device in the cohesion theory in which significant difference has been found between two cultural groups. After reviewing the literature, I didn't find relevant research findings concerning this respect. However, by going through the interview data, I did find some relevant messages which might shed light upon the factors regarding the significant difference in substitution. Reading through students' responses to the criteria of good English writing, 6 of the 24 Chinese participants mentioned the importance of correct grammar in the English writing, which was also stressed by their English teachers in the high school. Heji talked about different attitudes towards grammar in his L1 and L2 learning and writing:

> "在我看来，一篇优秀的英语作文，从整体到局部来说，首先文章结构一定要清晰，文章要非常流畅，其次，语句要符合语法，生动，长短句搭配，读起来不生涩，不故意使用复杂句，能使用一些较为新颖的词组。最后是单词的使用，不能只追求新颖生僻，最重要的是贴切。这是结构方面，内容方面要能提出自己的见解，要有思想，而不是一味地说一些老掉牙的东西。优秀的中文作文，我觉得最重要的是思想。然后就是文章结构清晰，语言生动。
>
> 两者判断标准还是有很大的不同的。我觉得这个最主要的原因就在于一个是我们的母语而另一个不是。因为是母语，我们对于词汇的使用，语法的准确性，语言的组织，都是比较熟悉的，所以在我们这个层次已经接受了很多年的中文教育的背景下，我觉得对于一篇中文作文是好是坏的评判更多的是侧重在它的思想上，而对于文章的用词和语句不会做太多程度的关注（当然前提是已经接受了多年的语文教育了，否则像小学生学写作文的时候，还是要关注用词，语法的），在思想深刻，能给人以思考的前提之下，如果语句生动，语言优美，

有一定的美的价值，那么可以称得上是一篇佳作了。所以中文判断标准主要是思想价值，其次是审美价值。而个人感觉英文不是母语所以英文写作中还更多的停留在是对于语法，语言的关注。上了大学还好一点，英语教学开始更加关注思想性了。但是高中时候的英语写作就是看单词是否拼错，固定搭配是否用错，是否有语法错误，如果文章比较顺畅，结构清楚，又使用了一些高级的词组或者单词，那么就是好的文章。"

As far as I am concerned, we can judge a good composition from its macro organization to its micro features. First of all, the organization of the composition should be clarified and the ideas in the composition should follow a smooth flow. Secondly, the syntax should be grammatically correct, but also vivid and not awkward, meaning long sentences should be combined with short ones, intentionally but awkwardly complex sentences should be avoided and some appropriate set phrases should be considered. Finally, vocabulary. It's more important to use appropriate words than extremely difficult ones. Above is the illustration about the structures. As far the contents, some individualistic and meaningful opinions are better than the repetition of sterile contents.

For a good Chinese composition, the most important criteria is the thoughts presented in it, ranked second is the composition structure and third is language vividness.

Big difference exists in the two sets of criteria, and I think the difference lies in the fact that one is L2 and the other is L1. As L1, we are supposed to be very familiar with lexical and grammatical usage and how to formulate a composition with them. On our level, since we have been educated in Chinese for many years the more important criterion to tell a good composition is the thoughts in it while less importance will be attached to the lexical and grammatical usage (The prerequisite is many years of Chinese education. For elementary school students, lexical and grammatical usages are also important). If the thoughts can be very thought-provoking, coupled with vivid sentences and beautiful language with great aesthetical values, such a composition can be a great work. Therefore, the judgment is dependent upon firstly the thoughtful values and then the aesthetical. As L2, personally I think English writing more relies upon attention to grammar and the language. When at college, we were taught to give more attention to thoughts in English writing. But in high schools, the criteria for a good English composition are correct spelling, correct collocation, correct grammar, smooth flow of ideas, clear structures and more advanced phrases and words. " (Translation)

From the interview data, we can infer that Chinese students write English essays according to grammatical rules, or at least it should be one of the stages in the process of formulating an English essay, composed of lexical and grammatical choices, creative macro organization of the writers' thoughts and original ideas appropriate for the topical contexts. According to the interviews of U.S. participants, grammar was not so significant as other elements. The interview data from both groups echoed with each other and were mutually supportive of the inference that in L1 writing, grammatical devices were subconsciously utilized while in L2 writing, they were given priority to and heavily relied upon, without which it is impossible for the L2 writers to organize their original ideas. Therefore, we may infer that Chinese students used more substitution in their writing due to their consciousness of the importance of grammar and their reliance on grammar to organize their thoughts, but for their U.S. peers, grammar seemed to be unconsciously managed.

Synonymy

U.S. students made use of more synonyms than their Chinese peers according to Hotelling T-test results. Possible explanations for this significant difference could be inferred from interview data from both U.S. and Chinese students. When asked about the criteria for good English writing, all 7 U.S. participants mentioned the lexical diversity to express the same meaning in order to avoid repetition while a majority of the 24 Chinese participants said that one of the difficulties that had hindered the natural flow of ideas in their writing was the lack of adequate vocabulary for them to choose from. Lihan considered insufficient vocabulary as the greatest problem for her writing. For lack of

vocabulary, her high school English teachers often recognized her writing as rigid and awkward due to the improper imitation of fixed sentence patterns and advanced words. What was even more important was how to select the most appropriate words in the right context so that the writer's intentional meanings could be accurately and naturally delivered. Wuhui described her experiences of such difficulties as follows:

初中的时候吧，特别希望能流利地用英语描述事情还有自己的心境，好吧，我遇到了无数困难……首先是词汇，当有很多同义词的时候不知道用哪个，或者说当我要描述我很开心的时候，小学时候我用 happy, 初中还是用 happy，到了高中大学还是还是用 happy……就是很多词语你懂了但是运用却是另外一回事了。目前还没有很好的解决方法，就是随意，觉得哪个合适就用哪个了，不过近来感觉看书看多了会有一定倾向觉得不同词语表达的意蕴会有些许不同的。正在解决中……

In the middle school, I wished so much that I could narrate or express myself fluently, so I met with numerous difficulties… First of all, vocabulary, when there are many synonyms, I had no idea of which one to select, or when I wanted to say that I was in a good mood, in the elementary school, I said I was happy, in the middle school, I also said I was happy, when in the high school, still I was happy… In other words, I may know the meaning of words, but not the use of the words. Till now, I haven't found good solutions, so I chose the word as I felt that it was good in the context. Recently, as I read more and more books, I could figure out the difference in the senses that different words might present. Improvement is still in progress… (Translation)

Yuna distinguished the situations concerning word choices in L1 and L2 writing:

中文写作可以信手拈来，因为对中国的语言比较熟稔，但是英文一般就需要深思熟虑，唯恐用错词语。中文写作总是会使用前人的经典话语以使得自己的文章显得很有水平，而英文不一样，英语写作用词很重要，也许是因为不是母语的关系，总感觉换一个词整个意思

就完全不同了。而且对于英语文化不熟悉的人一般不怎么敢尝试使用双关语或是先人的话语，很容易用错地方。

It's quite easy to write in Chinese since Chinese language is so familiar to us, but to write in English involves a lot of thinking in fear of incorrect word uses. In Chinese writing, the use of authoritative classic citations can upgrade my Chinese essays, while in English writing, word choices are very important. Probably due to the fact that English is L2, I am always not sure if I can use another word in the same context, which may make me feel that using another word may change the meaning completely. If we are not familiar with English culture, usually we are not so bold to make attempts to use puns or proverbs in fear of using the wrong expression in the wrong context. (Translation)

From the explanation above, we can infer that the lexical devices of using synonyms differ from L1 to L2 since for L1 writing, the native language and writing proficiency enables the L1 writer to naturally make word choices whereas for L2 writing, the insufficient language proficiency hinders the natural flow of the writer's ideas during writing and makes it so demanding for the L2 writer to choose the right words in the right places.

Following the analysis of linguistic factors associated with argumentative coherence, the third section of the conceptual model can be built as follows:
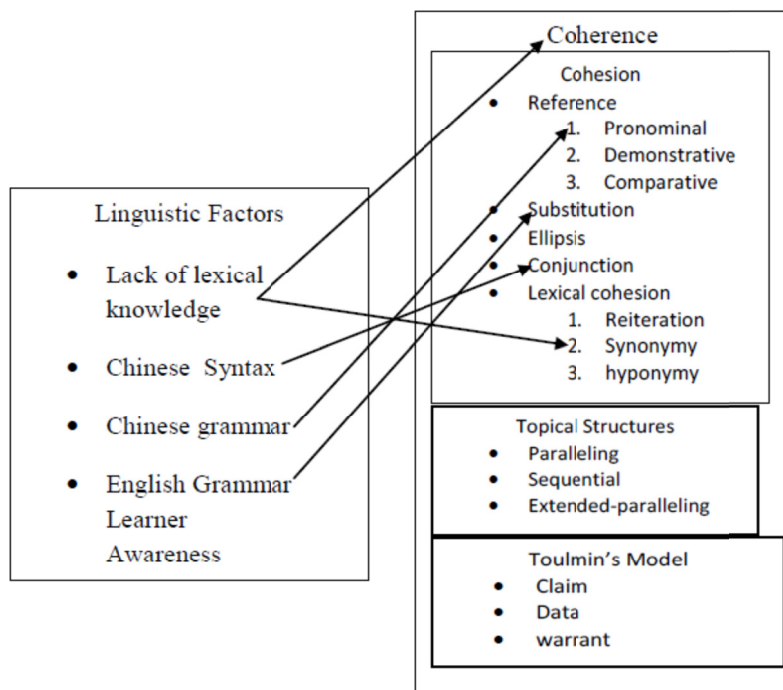
Figure 11. A conceptual model of argumentative coherence associated with linguistic factors.

The Interaction between Three Factors

In the following two sections, the third research question—i.e., how the three factors interrelated with one another—will be answered. During interview data analysis, I found some possible relationships between the three types of factors: language, rhetoric, and culture. The order of the three types of factors cannot be changed from concrete to abstract, from linguistic units to ideological patterns, from empirical data to conceptual explanation. The logical clue spans over a process of induction, as far as thinking approach is concerned. The following are two sets of such relationships possibly embedded in participating Chinese students' English compositions, resulting from memos

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written down during qualitative textual analysis. The two sets of possible association were specifically embedded in the use of emotional appeals and personal experiences in Chinese and U.S. undergraduate English writing.

Emotional Appeals

To illustrate how emotional appeals were represented by linguistic and rhetorical choices and reflecting ideological features, I will cite some textual data to enable readers to make inferences about the interrelation between the three factors of linguistics, rhetoric and culture. I will initiate the illustration by providing the linguistic and rhetorical evidence to demonstrating the track of the interrelationship: emotional appeals were usually presented by certain linguistic and rhetorical choices, which reflected Chinese students' cultural orientation of collectivism.

Linguistic features: Chinese students used more lexical devices of reiteration and synonyms in their compositions to construct emotional appeals. For example, Zhongwen tried to persuade readers of an alternative best policy to honesty by repeating the topic of morality in his essay:

> As far as I'm concerned, although honesty is of great significance, it is not the best policy. I think that **morality** is the best policy. Undoubtedly, **morality** contains the honesty, the nature, the manners and so on. In order to protect the social order, the policy, is from the **morality**. We can also say, the **morality** is the most closely related thing to the policy. In conclusion, I hold the view that **morality** is the best policy, and it contains honesty. Honesty is not accurate enough to be the best policy.

Rhetoric: This may be due to the rhetorical convention in Chinese that emotional appeals were encouraged in the arguments in order to be persuasive. In order to be emotional, paralleling structures would be used to accumulate emotions. As was found, the proportion of paralleling progression in Chinese students was higher than that in their U.S. peers' compositions. For example, Wuhui used a paralleling structure in his essay to stress the importance of honesty:

> **If it is not true, don't say it. If it is not right, don't do it. If it is not yours, don't take it. If it belongs to someone else, return it.** Honesty is not only the best **policy**, but also a **principle**. It is absolutely essential for the good and happy living of life.

Another paralleling structure was used in Wuhui's essay:

> Can you imagine living in a world without honesty? What a terrible life it will be! **There is no one you can** trust. **There is no one you can** turn to when you need help. You have to worry about everything you own or want to own because nothing is safe without the element of honesty. By the same token, there is no doubt that the society without honesty can't develop stably and rapidly, either.

Cultural Inferences: This rhetorical convention may be associated with Chinese culture which attaches importance to harmonious human relationships, stressing that a friendly human relationship was good for social communication. In other words, writers may have the belief in mind that people are concerned about each other and care about others' feelings so that the writers believe that their emotional appeals may arouse empathy among the readers. By doing so, their writing tends to be rational and persuasive. It has been stated that eastern writing tends to be rational while the western writing tends to be reasonable (Li, 1996).

However, there are conflicts in Chinese rhetorical conventions. When writers were asked to appeal emotionally, they were also asked to use objective and typical data in the arguments. Typical data were supposed to be social events identified by mass media. In Chinese student compositions, such data were very outstanding compared with their U.S. peers'. Another type of important data is the citation of ancient poems or articles written by famous poets or writers. These two types of data echo with the emphasis on authority in Chinese culture and Chinese writing instruction.

This pair of conflicts of being emotional and objective at the same time can be solved by referring to the topic of the compositions. Some topics may entail more emotional appeals. For example, if we ask college students to give their support to people living in poor areas, in such a persuasive writing, we need to appeal emotionally. Some topics may require objective data to justify the claim and persuade readers, such as topics about learning strategies and styles. In this sense, this is not a conflict if we take into consideration the topical context.

Personal Feelings and Experiences

The same logic will be followed to illustrate the case on the U.S. side: the illustration will be started by providing the linguistic and rhetorical evidence to demonstrating the track of the interrelationship between linguistic, rhetorical and cultural factors: Personal Feelings and Experiences were usually presented by certain linguistic and rhetorical choices, which reflected U.S. students' cultural orientation of individualism.

Linguistic features: Pronominal reference was greatly utilized in the compositions of two groups of students, but U.S. students used such much more than Chinese students. Three U.S. students' compositions were more like a monologue, and *I* is a high-frequency pronoun in the writing.

Rhetoric: This cohesive characteristic is related with the U.S. rhetorical convention which stresses the importance of telling personal experiences. Compositions without personal experiences were regarded as empty (Diederich, 1974). But in Chinese rhetorical conventions, objectivity should be valued. What can be identified as powerful data should be recognized by mass media or authorities.

Culture: In cultural studies, the emphasis on self-feelings was seen as individualism . We may infer that U.S. students nurtured in this individualism attached more importance to "me" or the individual writer' self feelings and perceptions. However, Chinese students, in order to seek objectivity, turn to authoritative sources for data, which possibly is due to the collective and hierarchical cultural conventions.

After examining the interrelationship between three types of factors, one more set of association can be established in the conceptual model:
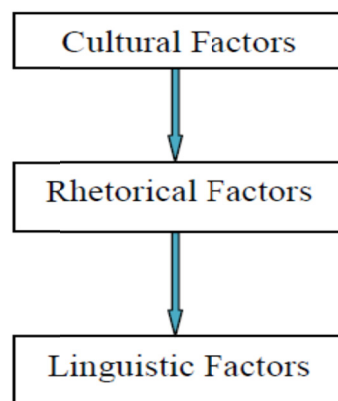
Figure 12. The relationship among three types of factors.

Correlations among the 16 Variables

In the above section, I qualitatively illustrated the interrelationship between three factors. In this section, I examine qualitative analysis with quantitative correlation studies. According to the inferences made in the section above, the correlation among some of the 16 variables across three types of factors is examined in order to determine if one variable may be indicative of another one in this conceptual model. More importantly, we expect either to reinforce inferences made previously or challenge them, depending upon the final results of the co-relational studies. In other words, such correlation will be assumed from the results of Hotelling t-test and the qualitative analysis of students' compositions. The assumptions will be tested by correlational studies. Therefore, in this section, deductive quantitative methods will be applied to conduct the analysis.

From previous research results in this study, I found that there might be a correlation between cohesion and topical structure in that if there are more examples of paralleling and extended paralleling progression, there are likely more lexical cohesive devices of reiteration, synonymy, and hyponymy. The paralleling topical structures entail more repetition of words or similar words. In order to test this assumption, a correlational study was conducted. Two sets of data were analyzed (Set 1: N=60, see Table 24; Set 2: N=30, see Table 25). From these two tables, it can be seen that when N=60, the correlation is much weaker than when N=30 with only data from Chinese group. It may be inferred that there may be positive correlation between lexical cohesive devices of

reiteration plus synonymy plus hyponymy and paralleling topical structures. It seems that

the correlation is much stronger in the data from Chinese students' group. Here is

Qianhao's composition which made use of 13 paralleling topical structures, but only 5

sequential and 4 extended topical structures:

Honesty is the best policy

The greatest writer in the English language and the preeminent dramatist in the world, William Shakespeare, admonished his readers that honesty is the best policy, whether for individual, or for society.
For ages we take this thing to be self-evident, that honesty is richer than any legacy in the world. Each time you are honest and conduct yourself with honesty, a success force will drive you toward greater success. Each time you lie, even with a little white lie, there are strong forces pushing you toward—you may probably suffer from mental pressures. A successful personage says the supreme beneficial of honesty is that you never have to remember what you have said, which helps you live blissfully. Unfortunately, in recent years, we see not a few well-known people in trouble because of dishonesty. Reports on false credentials, phony donations and lip-synch ruined their reputation the same as our trust. Honesty may not make you popular, but dishonesty is likely to mislead. For individual, the wise defined honesty as the first chapter of the book of wisdom. For society, it is regarded as core spirit of society. Ayn Rand wrote, "When you see corruption being rewarded and honesty becoming self-sacrifice, you may know that your society is doomed."
We want equitable media, not mendacious opinions; we pursue safe food, not polluted water, poisonous rice or powdered milk with melamine; we cry for an honest government with open information, not a corrupt administration with exorbitant taxes and punishment; we also thirst for society-wide justice, protect the innocent and punish the guilty. Nowadays all we are chasing for is the return of honesty. We need those conscientious media to disclose truth and let out our voices. We require enterprises to play honest operation and provide consumers with quality products. We also take it for granted that an honest, responsible government, with clean officials and other civil servants, be open with the masses, and that is surely to be the best policy.
Honesty should be a living object among individual as well as society, only in this way can we expect a harmonious future.

Thus, this composition's topical structures can be analyzed as follows:

1	honesty
2	honesty
3	a success force
4	mental pressures
5	the supreme beneficial of honesty
6	Dishonesty
7	reports
8	honesty
9	dishonesty
10	honesty
11	core spirit
12	society
13	equitable media
14	safe food
15	honest government
16	corrupt administration
17	justice
18	honesty
19	media
20	enterprises
21	government
22	policy
23	honesty

Paralleling	Sequential	Extended sequential
1,2	2,3	2,6
3,4	6,7	6,8
4,5	11,12	11,18
8,9	12,13	18,22
9,10	18,19	
10,11		
13,14		
14,15		
15,16		
16,17		
19,20		
20,21		
22,23		

This indication is aligned with the result of the descriptive quantitative analysis to compare the means of the frequencies with Hotelling t-test, which found that Chinese students used more paralleling topical structures than their U.S. peers. From Hotelling t-test, it was also found that there was significant difference between Chinese student compositions and U.S. student compositions in terms of extended paralleling progression.

(N=60)
Correlations (Chinese + US)

		LEXICAL	EXTENDED PARALLEL
LEXICAL	Pearson Correlation	1	.03
	Sig. (2-tailed)		.82
	N	60	60
PARATOPICAL	Pearson Correlation	.03	1
	Sig. (2-tailed)	.82	
	N	60	60

Table 23. The Correlations between Lexical Devices and Extended Paralleling Progression (Chinese + US).

(N=30)
Correlations (Chinese)

		LEXICAL	EXTENDED PARALLEL
LEXICAL	Pearson Correlation	1	.14
	Sig. (2-tailed)		.47
	N	30	30
PARATOPICAL	Pearson Correlation	.14	1
	Sig. (2-tailed)	.47	
	N	30	30

Table 24. The Correlations between Lexical Devices and Extended Paralleling Progression (Chinese).

Another assumption generated from previous analysis in this chapter is that there may be correlation between the frequencies of pronominal reference and the scores on data in two groups' students' compositions. Another correlational study was conducted when N=60, as shown in Table 27.

(N=60)
Correlations

		DATA	PRON
DATA	Pearson Correlation	1	-.24
	Sig. (2-tailed)		.07
	N	60	60
PRON	Pearson Correlation	-.24	1
	Sig. (2-tailed)	.07	
	N	60	60

Table 25. The Correlations between Data and Pronominal Reference (Chinese + U.S.).

This correlational study revealed that the scores on data were negatively correlated with the frequencies of pronominal reference. This correlational study may be able to support the previous inference that if students only used personal feelings and experiences as data, they might use more pronominal reference while their scores on data couldn't be high since their data might not be diversified enough to meet the criteria of the rubric based on which the compositions were assessed. As a reminder, the rubric is presented as follows:

Criteria for Judging the Quality of *Claim*, *Data*, and *Warrant*.

Claim
4. No specific problem stated and/or no consistent point of view. May have one sub-claim. No solution offered, or if offered nonfeasible, unoriginal, and inconsistent with claim.
5. Specific, explicitly stated problem. Somewhat consistent point of view. Relevant to the task. Has two or more sub-claims that have been developed. Solution offered with some feasibility with major claim.
6. Specific, explicitly stated problem with consistent point of view. Several well-developed sub-claim, explicitly tied to the major claim. Highly relevant to the task. Solution offered that is feasible, original and consistent with major claim.

Data
4. Minimal use of data. Data of the "everyone knows" type, with little reliance on personal experience or authority. Not directly related to major claim.
5. Some use of data with reliance on personal experience or authority. Some variety in use of data. Data generally related to major claim.
6. Extensive use of specific, well-developed data of a variety of types. Data explicitly connected to major claim.

Warrant
4. Minimal use of warrants. Warrants only minimally reliable and relevant to the case. Warrants may include logical fallacies.
5. Some use of warrants. Though warrants allow the writer to make the bridge between data and claim, some distortion and informal fallacies are evident.
6. Extensive use of warrants. Reliable and trustworthy allowing rater to accept the bridge from data to claim. Slightly relevant. Evidence of some backing.

- Source: *Linguistic/Rhetorical Measures for International Persuasive Student Writing*, By Ulla Connor (1990), Research in the Teaching of English, *24,* 67–87.

The following two examples could illustrate the differences in data types used by

Chinese and U.S. students:

Example 1: (Chinese)

An old Chinese proverb says**," A man without honesty is sure to**   Citing
be isolated; a nation without honesty is sure to fall apart." I guess   authority
Thomas Jefferson couldn't agree more with that, who once said,"
Honesty is the first chapter in the book of wisdom."
Honesty is important because it is what trust builds on. I have serious
doubts that a world without honesty can sustain. Let me shed some light
by looking at the bigger picture of how our market works. **Millions of**
transactions happen every day, with only a surprisingly tiny number
of breaches. It is remarkable that large numbers of contracts are

initially oral, confirmed by a written document only at a later time. Suppose even only a small fraction of outstanding contracts require adjudication, court systems would be overwhelmed. It is remarkable how much trust we have in our business counterparts. Believe it or not, we bank more on individual integrity than rule of law. In fact, laws, and regulations, no matter how delicately architected, will never eradicate wrongdoings. Nothing but honesty works all the time.

Ironically, honesty is increasingly becoming the most dangerous option because we live in a world of humbugs. There are political humbugs, academic humbugs, commercial humbugs and various forms of humbugs. I am saddened that it is sometimes inconvenient to acknowledge that honesty is the best policy. Those, unfortunately in large numbers, who pretend to be less naive always label honesty as immaturity. As a result, walls of distrust spring up between you and me.

But I am a strong believer that men are born honest. A world full of humbugs doesn't mean we individuals should take them for granted. You define the world, not otherwise. Anyone who thinks that one has to bend to humbugs must think again. Think about it. The pressing issues haunting the world can't be solved but by honest efforts by all human beings. *Global warming issue will be sheltered untouched until the final day of the earth if nations with different immediate concerns still eschew their share of responsibility. Conflicts between nations, especially in Middle East, will never end without sincere talks.*

It is obviously self-defeating to claim that honesty is naive or dangerous. Nobody goes to bed with a gun in his hand. Honesty is essential between you and me, and beyond that, between you and the world. Let the voice be heard," Honesty is the best policy. "

Example 2 (U.S.)

I agree with the statement," Honesty is the best policy." **The reason for my decision is because when being honest you don't have to worry about continuing lying. For example, if you lie about being sick, you must continue to lie to everyone else so you won't get caught in your lie. Sometimes we become overwhelmed with life and when somebody asks you about being "sick" you may simply say, "I am not sick" because you were caught off guard.**	Inferential analysis
Additionally, being honesty will make you a better person. Someone who constantly lies will give off an impression as untrustworthy and a liar. You will build a reputation that may affect your career and social life. Who is going to want to hang out with a liar? What company is going to want a liar working in their business? In this society, our reputation CAN SEVERELY AFFECT OUR FUTURE. HOWEVER, by being honest we can avoid all the negativity.	Inferential Analysis
All in all, being honest beats lying. There are a lot more positive outcomes from honesty than there is from lying. **It is understandable that sometimes a white lie is needed to get ourselves all of some kind of trouble.** However, lying can become a habit and a bad habit. To stay on safer side, honesty is the best road to choose.	Rebuttal

From these two examples, we can see that in the first example, more data types were used than the second one. From the textual data analysis, I also found that U.S. students tended to argue with personal feelings and emotions, so more pronominal reference was probably used than their Chinese peers whose data types were more diversifies with fewer personal feelings but more socially connected data types. Based on the analysis in this section, the conceptual model concerning the relationship among three indices of coherence may be refined as follows:
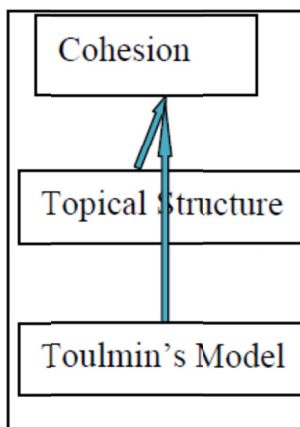
Figure 13. The Relationship among Three Indices of Coherence.

With the above analysis, the general hypothesis at the beginning of the study can be answered: Culture is associated with Chinese undergraduate EFL writing. The result of the study supports this assumption. The arrows in Figure 13 indicating the association are initiated from cultural factors. Therefore, it can be inferred that culture is associated with Chinese students' argumentative coherence in their English writing in the EFL context. This association is built by means of rhetorical and linguistic choices of the writing. Cultural factors are associated with rhetorical factors and linguistic factors, all of three factors associated with argumentative coherence in Chinese students' essays. Additionally, cultural factors are directly associated with argumentative coherence defined by three indices. This study, by mixed methods and constructing a conceptual model, once again, supports the assumption of contrastive rhetoric that culture is associated with second language writing. The conceptual models formulated in the above analysis demonstrate the direction of the association and clarify the rationale behind this association.

Synopsis

In this chapter, the initial conceptual model formulated in Chapter I was assessed and refined. The association between culture and writing was illustrated and elaborated upon at three levels: the level of three factors, the level of three indices, and the level of interaction between three factors and three indices. As found from qualitative textual data analysis, cultural factors were associated with rhetorical choices, while rhetorical choices impacted linguistic features. At the level of 16 variables, through correlational studies, it was found that both of the Toulmin's Model and Topical Structures were related with cohesion. The association can also be explained as the logic determines the contents and the contents determine the forms of the language.

The interaction between the subcategories of cultural factors as well as rhetorical and linguistic factors and three indices of argumentative coherence composed of 16 variables appears to be more complex. As indicated by the analysis of text and interview data, ideological cultural factors were associated with pronominal reference, lexical choices, topical structures and the features of data. Since Chinese students were influenced more by collectivism and believed in authority, data used in the arguments were more objective and less personal than their U.S. peers' essays, but in U.S. students' arguments, more pronouns were used. Chinese students were also encouraged to use more emotional appeals in their Chinese writing, resulting in more paralleling topical structures in their English essays and more frequent use of such lexical devices as reiteration, synonymy and repetition. It was also found that rhetorical factors were associated with topical structures. It appeared that Chinese rhetorical conventions of

establishing frameworks in the writing made Chinese students seem more likely to use

extended paralleling progression more frequently than their U.S. peers. Classroom culture

was also found to be associated with the quality of claim and data. Since Toulmin's

Model was modified into three elements of arguments in Chinese writing instruction,

Chinese students were more familiar with them and used them exactly as measured by the

rubric adopted in this study while their U.S. peers were not taught how to use the three

elements in Toulmin's Model, which accounted for the lower scores on the three

elements based on the rubric of Toulmin's Model. Chinese linguistic features, such as

lack of anaphoric pronouns and loose structure of syntax were also identified to be

associated with grammatical devices of cohesion.

Chapter VII

Quantitative Inferences, Qualitative Conclusions and Pedagogical Implications

In this chapter, some inferences were made to hopefully contribute some insights to research studies of contrastive rhetoric and coherence. A brief review of research findings initiating the enunciation of the contribution may function well as a reminder and link the study process with these tentative conclusions. As I explained in Chapter I, the purpose of this study was two-fold: for one thing, it was aimed at making some contributions to English writing instruction and English writing assessment; for another, the study is expected to contribute to theory development regarding coherence and second language writing. In this chapter, in light of the findings presented in Chapters V and VI, pedagogical implications for writing instruction, assessment, peer review and self-revision were discussed. These implications were generated from the process of data analysis and the conceptualization of the structural model to define the concept of coherence. Limitations of this study and future studies will also be suggested at the end of the chapter. Ultimately, I suggest that similar contrastive rhetorical studies should be conducted on genres other than arguments. The effects of applying theories of cohesion, topical structural analysis, and Toulmin's Model can also be investigated through classroom inquiries. Literacy studies of text and the interaction between the writer and the reader on the interface of the text in a historical and social discourse are also suggested.

Quantitative Inferences and Qualitative Conclusions

The coherent review was conducted by repeating the three Research Questions and the Corresponding Research Findings. The three research questions have been illustrated in the following figure as it was in Chapter III:
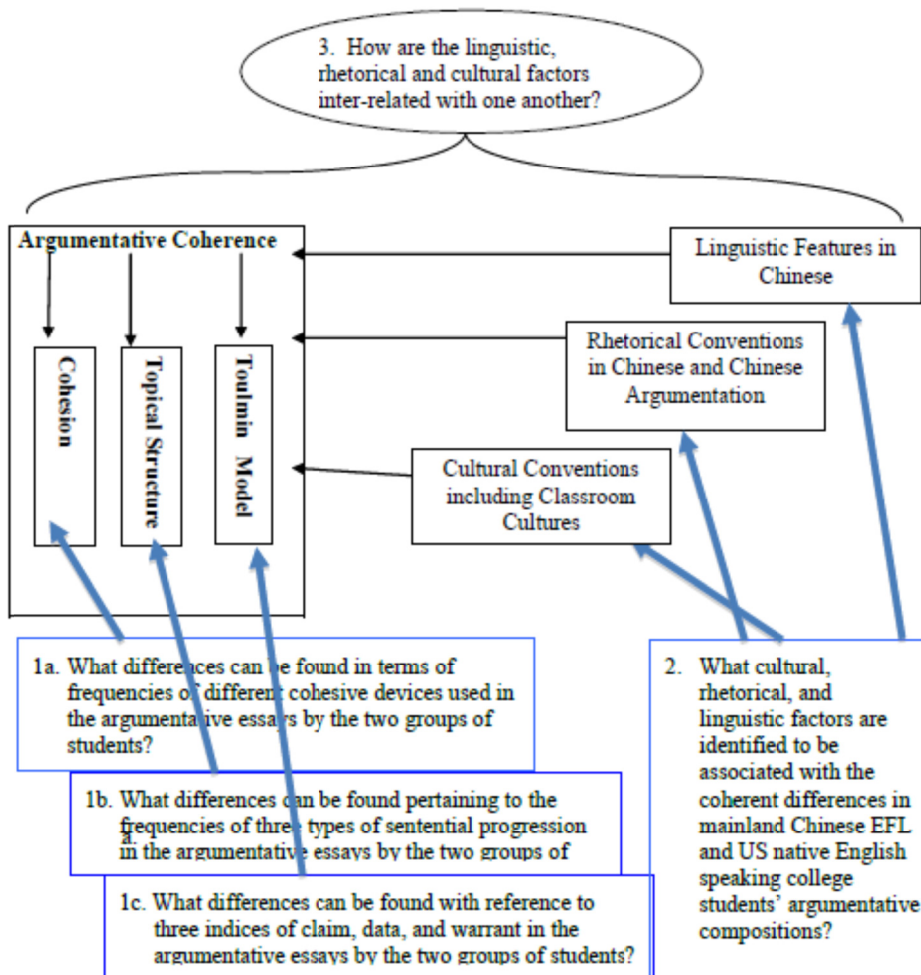
Research question 1 was aimed at finding out the significant difference in terms of cohesion, topical structures and Toulmin's Model across two groups of students. In the aspect of cohesion, substitution was found to be used more often by Chinese students. On the other hand, *conjunction and synonymy* are used more often by U.S. students. As for

topical structures, no significant differences were found among the data. There is a chance, in light of the near significant result coupled with the extensive examples offered in the students' essays, that *extended paralleling progression* might be used more often by Chinese college students. On the other hand, data suggested with even less certainty that *sequential progression* might be used more often by U.S. students. Thus, more investigation may be merited. Regarding Toulmin's Model, Chinese students scored higher than their U.S. peers in terms of data. No significant difference has been found on claim and warrant.

Based on the inferences made by statistical procedures in research question 1 methodology, research question 2 was asked to investigate the consistency of the inferences with participants' interview responses, concerning the cultural, rhetorical, and linguistic factors identified to be associated with the coherent differences in Mainland Chinese EFL and U.S. English speaking college students' argumentative compositions. The following tentative conclusions were made from qualitative data analysis and interpretation. Chinese cultural conventions were found to have attached much value to collectivism which has been reinforced by classroom cultures highlighting text and instructor authority. The writing instructors delivered the conventional values by establishing rhetorical rules and asking students to follow the rules in order to achieve their academic success. In alignment with such cultural convention, rhetorical patterns in Chinese Argumentation were well recognized as the following**:** *qichengzhuanhe* 起承转合, *yinyilianjie* 引议联结, *zongfenzong* 总-分-总, and Toulmin's Model = *yilunwen de sanyaosu* 议论文的三要素. Rhetorical devices, such as metaphor, personification, simile,

and exaggeration were also highly recommended in Chinese writing to elevate the delicacy of the writing style. As for Toumin's Model, I found that the concept of *data* was not elusive to Chinese students, who could actually name a variety of types of data to support their claims. However, the validity of *data* as evidence in research to support assumptions was still questioned by them. Linguistic features in Chinese, such as the lack of conjunctive devices and reflective pronouns were also found to be associated with the findings in research question 1. In addition to the Chinese linguistic features, the fact that Chinese students' difficulties in writing English compositions mainly lay in vocabulary acquisition on the productive level was found to be related to the findings in research question 1.

Research question 3 investigated the interaction among linguistic, rhetorical, and cultural factors. The findings in this question shed light upon the hierarchical logical order among the three factors: Such cultural factors as the ideological identification of collectivism and individualism guided the rhetorical choices through classroom instructional preferences in the two cultures. Those rhetorical choices were externalized by linguistic devices, grammatical and linguistic. These findings help us to better understand the mechanism or process of cultural impacts upon writing or cross-cultural writing, hence, better understanding of students' final writing products so that writing instruction can be better informed in cross-cultural context.

Implications for English Writing Instruction

English writing instruction has been concentrated on the linguistic level. Either the lexical or grammatical aspects have been greatly stressed in students' English writing

in the EFL context. When English teachers are confronted with students who have had little difficulty in meeting standards exposed to them at lexical and grammar levels, English teachers may not know what to do next to explore other aspects or criteria to meet students' needs. In the interview data, Chinese students expressed their frustrations by saying that they taught themselves to write in English, and dictionaries were their best teachers. They were eager to know what good English writing was, hoping their English compositions could be reviewed and feedback could be offered with respect to effective revisions.

This study, by examining three indices—cohesion, topical structure, and Toulmin's model—provided lenses for examining students' compositions and giving feedback accordingly. By teaching these three indices, teachers can give definite instructions about how to compose a good composition in terms of coherence, since coherence is such an important concept for English writing. According to the nature of the three indices, I offer suggestions for informing writing instruction:

1. Instructors are suggested to lead students toward a meta-cognitive consideration of cohesion theory by enunciating the difficulties of using appropriate lexical and grammatical devices and the cognates that are probably related with these difficulties. Chinese students learn to write English essays by following grammatical rules, which may make the writing appear grammatically neat but awkward to a native speaker for natural meaningful flow of the writer. Diversified lexical choices can be difficult for Chinese students in their English writing since vocabulary acquisition on the productive level is more complicated than receptive acquisition. Thus, one

might advise that more opportunities for vocabulary productive acquisition be given to students by asking them to write about a variety of topics and at the same time raising their awareness of synonymous lexical choices. As for conjunctions, it is just acceptable to have fewer of them if semantic relations are self-evident without the conjunctive indicators. Anyway, for this aspect, I suggest that further studies be conducted to examine the difference in the frequencies of conjunctions from different genres by a corpus approach.

2. Topical structural analysis is effective in promoting the meaning delivery in the writing, preventing the meaning flow from going astray. Among the three topical structures, sequential and extended sequential progressions can be highlighted considering their function of adding to the depth of text scheme and making the meaning of the text increasingly insightful.

3. Toulmin's model is vital to help students deal with the logical structure of their argumentation, namely claim, data, and warrant. Claim should be enunciated clearly so as to propose the appropriate arrangement of data and warrant to strengthen the arguments. Data are expected to be diversified to triangulate the underpinnings of the claim. Warrant pertains to the logical and methodological aspects to cohere data with claim.

The following is some how-to knowledge about using the three indices in the writing instruction. The knowledge is going to be specified according to the three indices: how to teach cohesion, how to teach topical structure analysis and how to teach

Toulmin's Model. All these how-to knowledge was summarized in the process of data analysis and noted down in the memo.

How to Teach Cohesion

Cohesion is focused upon principally grammatical and lexical devices. Usually, grammatical devices have been stressed when teaching students how to use conjunctions or three types of reference in the writing. Substitution and ellipsis were more commonly found in oral communication, not in writing. In the textual data of this study, the frequencies of these two types of cohesion were much lower than three types of reference and conjunction. Compared with grammatical devices, lexical devices were less used although, in the data, high frequencies of reiteration were found, which may be related with the title "Honesty is the best policy." In fact, most of the words reiterated are honesty or similar expressions like *being honest*, *behaving honestly*, or *to be honest*. If it were not for such a title, there might not have been so many lexical devices used. As a result, I suggest that, besides teaching grammatical cohesive words and expressions, lexical devices should be noticed and exercises of using such devices should be included in the classroom writing instruction.

How to Teach Topical Structure Analysis

Topical structure analysis is more complex to conduct than the analysis of cohesion. The main problem of topical structure analysis lies in the identification of three types of sentential progression. After studying the theory of topical structure analysis, I myself feel quite certain about identifying such structures; however, clearly such was not so easy for students. It was impossible for the topic of each sentence to be in hyponymy

with the topic in the following sentence. It was also not so easy to tell where the topic was in a sentence. In this study, I followed the rule that usually the subject of the sentence is the topic. Such a rule is also helpful for using topical structure analysis in English writing instruction, which will be illustrated later in this chapter. During data analysis, I found that there was a well-defined way to distinguish three types of sentential progression. The golden rule is this: if it is not *paralleling* or *extended paralleling*, it must be *sequential* since it was easier to identify paralleling progression when two identifiable topics were seen in two sequential sentences.

Even if one can distinguish these topical structures accurately, an essential question remains: What is the best topical structure like? English teachers may be interested in this so that they can show to the students. After analyzing the topical structures, I found that good English compositions identified by holistic assessment followed the following topical structures regardless of the different cultural groups: Chinese and U.S. cultural groups. The following are two compositions and their topical structure analysis.

Composition 1

Honesty is the Best Policy

I live my life by being brutally honest. If I am asked a question I will answer truthfully. Although there is are times when you must say the partial truth. Most times the social rules we have stop us from sharing what we truly believe. Sensitive issues sometimes require us to fib from time to time. So is honesty always the best way to go?

People that know me have come to realize that I am completely honest with them. But I do not think you can be that honest with someone until a comfort level with that person has been achieved. You do not just go up to someone and comment on how bad they are dressed, something like this can only be said to someone that knows you and knows that you mean no disrespect but are only just trying to help them. Honesty goes

along with trust. It seems most people are only truly honest with people they know and have no problems lying to strangers, something I just cannot understand.

I think it is easier to live life honestly. If you lie you have to remember not only the truth but the lie as well. This could cause problems if you encounter the person you are lying to on a regular basis. I have seen many problems arise from falsehoods. And I have lost much more because of the lies of others. To lie goes against my better judgment, so when I have a class of my own I will do my best to keep it honest.

In an educational perspective, I think honesty should always be used. In my future classroom I want to be honest with the children at all times. I also expect my students to be honest with me. Working with children in the past has made me realize that children are honest in nearly all things that don't make themselves look bad. Even when they lie it is easy to tell a lie from the truth. If it were all up to me everyone would be honest all the time, yet I do not believe people are capable of accepting the truth all the time. A balance between honesty and deceit is what makes life a little bit easier.

Here is the topical structure analysis:

```
1      I
2      I
3        times
4             Most times
5                  Sensitive issues
6                       honesty
7      I
8        you
9        you
10           Someone
11              honesty
12                    most people
13     I
14       you
15       you
16           falsehood
17     I
18       to lie
19     I
20       honesty
21     I
22     I
23       working
24           it
25               people
26                   a balance
```

Composition 2

Honesty is the best policy

What is universally acknowledged is that "Honesty is the best policy", while few of us have a good knowledge of the origin of the proverb.

Actually ,when little George Washington bravely admitted to had cut down his father's favorite cherry, instead of strict punishment, his father forgave him and said-Honesty is the best policy-which turns out to be the motto of many people just like me.

From my point of view, honesty is to human beings what water is to lives. First of all, the benefit of being honest is self-evident. Good reputation can be obtained for your honest quality. As a reliable person, dealing with you can be a pleasant thing. In the mean time, being honest strengthens your soul. It's obvious that you may benefit from honesty in financial and moral.

Then, what about being dishonest? Well, just imagine what would be like if a man is accustomed to tell lies, that is to say, honesty means nothing to him. Once his dishonesty gets people in trouble or hurt their feelings. There is no doubt that people won't trust him any more in turn. As a consequence, his reputation is ruined by himself. What's worse, not only is the process of rebuilding far more difficult than ruining it, but also your guilty and depressed feelings are likely to have a bad effect on your life.

From what has been discussed above, we may safely draw the conclusion that – Honesty is the best policy. As a university student, we should try our best to inherit the traditional excellent quality-honesty-and bring it to a greater height of development.

Here is the topical structure analysis:
1 Honesty
2   origin
3   George Washington
4   his father
5 motto
6 honesty
7   benefit
8   Good reputation
9   dealing with you
10   benefit
11 dishonesty
12   a man
13   his dishonesty
14   people
15   his reputation
16   the process of
17   feelings
18 Honesty
19   we

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From these two examples, one may find that they all have several extended paralleling progressions which display themselves at almost similar intervals. Not only are the patterns beautiful to look at, but they also demonstrate that the compositions delivered insightful meanings by having several continuous sequential progressions. In view of this, one may suggest that students can write with a topical structure similar to the two examples, which probably can be rated highly with the holistic assessment of the compositions. By observing the above two topical structures, one might also suggest that students can organize each paragraph according to the topical structures demonstrated in the above two examples. One extended paralleling progression may present itself as one paragraph if paragraphing is one of the student's difficulties in writing English compositions. Another lesson learned from topical structure analysis is that using the same subjects in sequential sentences should be avoided, or readers may register such as too repetitious.

How to Teach Toulmin's Model

Toulmin's Model had been modified as three elements in arguments and taught to Chinese students in their high schools in Chinese writing instruction. In addition to the three elements, there were other rhetorical patterns taught in Chinese high schools. But the three elements were from English rhetorical conventions, so it will be more appropriate to teach them in English writing instruction with other Chinese rhetorical conventions as supplementary. One issue with teaching Toulmin's Model in college English writing instruction is that *warrant* had been recognized as a process of justification, not a noun meaning the bridge between *claims* and *data*. This difference in

understanding *warrant* should be explained to the students, and the meaning of *warrant* should be clarified. During data analysis in this study, I found *claim* and *warrant* difficult to distinguish since both of them are general and abstract statements. The rule for distinguishing *claim* and *warrant* is that *warrant* is usually a well-established rule or maxim while *claim* is the statement of writers' personal opinions. Based on the positions of the statements, *claims* can also be distinguished from *warrants*. *Claims* should be in front of *warrants* at the beginning of the compositions or paragraphs, but *warrants* should be at the end of the paragraph or compositions.

Chinese participants in this study stated that they couldn't have as many rhetorical patterns to follow in their English writing as they were provided in their Chinese writing. Thus, for any complex writing assignment, they would have to adopt Chinese rhetorical conventions to organize their composition structures. Toulmin's Model should be good enough to enrich their rhetorical endeavors and provide them with more rhetorical choices. It is their turn, then, to take the options and use them in the right topical context.

How to Integrate Three Facets of Coherence in Teaching

After elaborating upon pedagogical implications of three facets of coherence: cohesion, topical structure analysis, and Toulmin's Model, I will suggest that English teachers should attempt to integrate the three facets in their teaching, especially with college age Chinese students, since these three facets are correlated. Cohesion or the form facet of coherence is the physical externalization of the other two, while topical structure analysis is located in the middle, relying upon the form (cohesion) to deliver the meaning and guided by the logic (Toulmin's model) to ensure that the writers' ideas are marching

out in a reasonable order. Logic appears to be on the highest level of the three. Knowing

the hierarchical relationship among the three, English teachers can teach writing by

integrating the three facets after analyzing them separately.

One strategy is to categorize linguistic forms and apply them appropriately to

each type of topical structures and each element of Toulmin's Model. Different types of

topical structures can be matched with three elements in Toulmin's Model, which means

different logical relationships should be manifested by different topical structures, and

different topical structures should be constructed by proper grammatical and lexical

devices. A simile is helpful to illustrate the integration: the process of the integration is

like constructing a house: the blueprint of the house is Toulmin's Model; the framework

of the construction is the topical structures; and the bricks are the grammatical and lexical

devices.

Implications for English Writing Assessment

Holistic assessment has been recognized as the best way to assess students'

writing (Barkaoui, 2010), but it is not appropriate for teachers to give feedback,

especially for teachers to conduct formative assessment. This study was also concerned

about another type of assessment of students' writing: analytic assessment. Analytical

assessment means breaking the writing into several parts and then giving comments on

each part. Diederich (1974) proposed that raters be expected to "give scores to individual,

identifiable traits, and these scores are tallied to provide the rating for a paper" (as cited

in Huot, 1990, p. 238). These analytical scores were also recognized to be the most

reliable of all direct writing assessment methods (Huot, 1990). Diederich put forward

eight variables within five factors in an attempt to make writing assessment more holistic as well as analytic. By analyzing the assessment of students' essays conducted by raters from different professions, he identified (a) Idea, (b) Error, (c) Organization/Analysis, (d) Wording/Phrasing, and (e) Flavor/Personal qualities as five factors associated with judgment of writing quality, from which eight features were generated: (a) Ideas, (b) Organization, (c) Wording, (d) Flavor, (e) Usage/Sentence Structure, (f) Punctuation/Capitals/Abbreviations/Numbers, (g) Spelling, and (h) Handwriting/Neatness. Recently, researchers in e-rating English essays developed another set of features to meet the need of electronic English writing. The set of micro-features include Grammar, Usage, Mechanics, Style, Organization, Development, Lexical Complexity, and Prompt-Specific Vocabulary Usage (i.e., content; Attali and Burstein, 2006).

In this study, three aspects with 16 sub-variables were recognized as describing coherence quality in students' essays. According to the theoretical synthesis in the introduction, there are three aspects concerning coherence in a composition: cohesion, topical structures, and Toulmin's Model. English teachers can separately assess students' compositions according to the three aspects and give specific comments so that students can clearly know what they are expected to do with their compositions instead of receiving very general comments and being left frustrated about how to improve their writing or even the expectations they strive to meet.

Analytical assessment may manage subjectivity in writing assessment. In order to keep subjectivity under control, raters can make use of strategies like transparency and triangulations in the process of assessment. In terms of transparency, raters may be able

to specify the process of the assessment instead of keeping the process unknown to the students. Based upon the three indices, raters and students can discuss how to assess a composition analytically in a specified mode, not on the basis of intuition or sub-consciousness.

Triangulation here refers to the triangulation of theories to examine one construct in order to make the assessment more trustworthy. In this study, in order to examine the construct of coherence, five theories were compared and synthesized. Therefore, having three indices to conduct analytical assessment can give more facets to writing feedback as well as keeping raters' subjectivity under control.

Analytical assessment has been the foundations for e-rating students' compositions, complementary to human holistic assessment of writing (Enright & Quinlan, 2010). By comparing holistic assessment rubrics, Enright and Quinlan (2010) identified that e-rating models couldn't assess the uses of clearly appropriate explanations, exemplifications, and/or details, and displays of unity, progression, and coherence of the writing in the rubric. Variables generated by cohesion theory, topical structure analysis, and Toulmin's Model should be able to shed light upon the issue identified by Enright and Quinlan (2010). Those variables may be appropriate for inclusion within e-rating models, perhaps helping any model resemble human holistic assessment rubrics.

Implications for Self-Revision and Peer-Review

Self-revision and peer-review up to now have been mainly process-based since content-based challenging questions for self-revision and peer-review have not been sufficiently developed. Self-revision was mostly self-editing of spelling, grammatical,

and lexical mistakes. Topical structures and the macro structure of the writing have not been inspected. As far as peer-review is concerned, the organization of the writing has been considered but no specific rules were available for reference, so peers can only review the writing according to their own holistic feelings. Considering that both self-revision and peer review are writing assessment, we may also want to provide additional options for writers themselves and their peers aside from holistic assessment rubrics. I suggest, therefore, that the 16 variables generated in the study be used as an analytical rubric for self-revision and peer-review to inspect the quality of writing on three levels: form, content and logic. Occasionally, these micro-structures should be considered during peer reviews, especially since content and logic often lack sufficient attention.

In fact, I have not yet found a rubric with specific content-based instructions to facilitate self-revision and peer-review on three levels of form, content, and logic. Thus, I suggest a set of challenging questions to analytically assess, self-revise, and peer-review writing:

1. Cohesive devices:

   ❖ Grammatically, are there some mistakes concerning reference, substitution, ellipsis, and conjunction? As for reference, are the personal, demonstrative pronouns properly used? Are the comparisons properly conducted in the writing with the right word choices?

   ❖ Lexically, are there too many repeated words in the writing? Are the synonymy and hyponymy properly used to avoid too many repetitions?

2. Topical structures:

❖ Is the length of each T-unit too long or short for the semantic context and meaning delivery?

❖ Are there too many paralleling progressions so that too many topics are introduced but not developed adequately?

❖ Are the topics in the sequential progressions semantically or meaningfully connected? Is there hyponymy or quasi-hyponymy relationship among the topics?

❖ Is the conceptual framework that cues through an extended paralleling progression properly constructed? Is the initial T-unit echoing with the concluding T-unit?

3. Toulmin's Model:

❖ Is the claim clearly stated? Is the main claim fully and explicitly stated with several sub-claims? Are all the sub-claims clearly stated?

❖ Are the data composed of properly selected facts to support the claims and sub-claims? Are the facts typical to be supportive of the claims? Are their different types of data used, such as statistics, social events, personal experiences and stories? Are there proper supports of logical inferences and emotional appeals?

❖ Warrant can be regarded as an authoritative statement and the process of justification. As an authoritative statement, is the warrant a true maxim or a widely accepted rule? Is it persuasive enough to justify the claim or proposition? As a process, is it a properly conducted process of

comparison and contrast, deduction, induction or a mixture of deduction

and induction, or chronicle narration?

This set of questions may provide more options for writing assessment, self-revision, and

peer-review, hopefully enabling writers to develop themes and topics from multiple

perspectives. Furthermore, these questions may assist assessors and reviewers with

inspections of writing on multiple levels. Such a set of challenging questions can be

separately used to train writers and assessors until they are adequately skillful in self-

revision and peer-review with reference to the whole set to conduct holistic assessment of

the writing.

Chapter VIII

Discussions of Theoretical Contributions to Contrastive Rhetoric, Argumentative

Coherence and Methodological Issues

In this chapter, the association between theories undergirding contrastive and intercultural rhetoric and the results of data analysis will be discussed, in addition to the theoretical contribution to the theories of argumentative coherence in cross-cultural writing. A research concern that bilingual English speaking college students may have different rhetorical preferences from the monolingual native English speakers in the U.S. will also be discussed, based upon textual and interview data in this study and relevant findings in studies of U.S. rhetorical conventions. Aside from these theoretical aspects, some methodological issues will also be included in this section. Differences between mixed methods and triangulation will be elaborated upon by citing articles and referring to the research design of this study. The paradigm issue in mixed methods has been under heated discussion. Probing the definition of the concept will be conducted by approaches of contextualization and categorization.

The Relationship of EFL Writing and the Social Discourse

Text or writing is an artifact of culture. If culture is different, text will be different. This is the general theoretical assumption this study is based upon. Writing was studied by referring to the communication between the writer and the social cultural discourse the writer was in. By quantitatively and quantitatively analyzing data from interviews and

student essays, some discourse rationales were discovered to account for the differences. Using the social theory of language and the semiotic theory of culture, I reached a better understanding of relationships between text and culture or social discourse according to terminology used in the social theory of language and the semiotic theory of culture. Text, thus, is a product of dynamic interaction between the writer and the social discourse composed of the reader, the institution and social culture. Changes in the aspects of the social discourse will result in the discrepancies in text. By applying these principles, in this chapter, I will discuss the relationship of EFL writing and social discourse.

Analysis of the Components of EFL Social Discourse

EFL learners' social discourse is more complex than ESL learners' in that the EFL social discourse is the integration of native social and English social discourses outside a target language and culture context. The status of the two discourses is not equal, with the native more overwhelming than the English. The blending values of two types of discourse can be embodied within the EFL teachers, most of whom are non-English speakers, and also within the educational institutions with more native cultural overtones than English even in a foreign language school or department since faculties and staff are not native English speakers. Additionally, the interaction between an English teaching institution and the global native cultural discourse undermines its very weak English overtones, making it even worse for EFL learners to find the right English cultural discourse sufficient for their English language learning.

The relationship between language and power was identified as symbolic by Bourdieu (1991). In the EFL discourse, English teachers representing the power of a

foreign language may probably be overshadowed by native language teachers who stand for the most powerful native language. The interaction between these two linguistic discourses makes EFL teachers less influential and their EFL rhetorical rules recognized as unexpected by the EFL learners compared with the learners' native language rhetorical choices taught by their native language teachers and reinforced by the institutional policies concerning assessment. As Senah (2009) stated, some rhetorical conventions have been well-established to be canonical in the academic institutions or communities. Students are required to follow them in order to be accepted by the institution. However, in an EFL world, these canonical rhetorical rules are mainly native, not English because native language has the power.

The empirical data in this study showed that most of Chinese students followed Chinese rhetorical conventions taught to them by their Chinese instructors in order to pass high-risk tests like college entrance exams. English teachers, in their opinion, didn't teach much about English rhetorical rules. For simple English writing tasks, students can apply English rhetorical patterns, as simple as they are. But they must also use Chinese writing conventions if the task is much more complicated than a three-paragraph 100 word writing assignment. Confronted with such, some complained that they hadn't learned much from College English courses. The fact is Chinese English teachers are following English rhetorical rules, which may be regarded as natural in English cultural discourse but inadequate in Chinese social discourse. This conflict brought about pedagogical and academic issues heretofore confronting Chinese English teachers.

EFL Learners' Difficulties in English Writing

EFL is different from ESL in terms of social discourses they are in. ESL is learned in the English speaking and English cultural discourse while EFL is learned in a non-English speaking and non-English cultural discourse. By this comparison, one usually discovers that ESL is studied in the right social and cultural discourse matching with the English language. According to Bakhtin's theory, there should be natural communication between ESL learners with the social discourse. Text and utterance will be acquired through the communication. But it is quite problematic for EFL learners to learn English since the social discourse is not English so that text and utterance cannot interplay with an English social discourse. Actually, EFL learners have to rely on their native language and cultural discourse to study English. Consequently, they will integrate their native languages' phonological features and their native cultural overtones into their EFL writing and utterance. Quite a number of the students stated that their difficulties in English writing were that they were not sure how to use words in the right contexts and how to present the right culture with the right expressions and sentences in their English writing. These difficulties were also related with the lack of an English social discourse for the EFL learners to communicate with.

Previously, Bakhtin's thoughts were applied in designing curriculum and instruction of foreign language education, but few researchers have applied the social theory of language to interpret EFL learners' difficulties in learning English literacy. This association accounts for the necessity to provide an English social discourse or at least emulate such a discourse for EFL students to facilitate EFL learners' overcoming the difficulties. Such a discourse, according to the social theory of language, may be

composed of local level and global level. Local level is linguistic and semantic, including authentic English reading, audio and video materials for EFL learners to emerge in. Global level refers to the emulated cultural atmospheres or the real English cultural discourse for EFL learners to communicate with and learn English literacy in.

EFL Learners and English Social Discourse: Three Encounters

In this section, I attempt to elaborate upon EFL learners' three encounters with English social discourse in the process of their acculturation into English academic communities. At the first encounter in the learners' native country as EFL learners, the English discourse is emulated and artificial, weak and powerless. As explained in previous paragraphs, such an inauthentic discourse partly accounts for the difficulties EFL students meet with in this period. Most of the discourse overtones are native, not English. EFL writing is more of a native cultural orientation, which extends its impacts to the second encounter of the EFL learners with the English social discourse if they move to an English speaking country and study there. Initially, due to the native cultural impacts, there are cultural conflicts between EFL (Now they become ESL students in an English speaking country) students and the academic community they are studying in.

ESL students' second encounter—the new academic discourse they move to—has been studied substantially. The communication between ESL students and their English speaking professors has been examined with reference to the theory of situated literacy. Educated in the native discourse, ESL students often go through a period of confusion and setbacks in the acculturation process (Saneh, 2009). Some pass and some fail, depending upon the extent of their acculturation into English culture at the initial period

of the second encounter (Saneh, 2009). If the academic community provides enough aid and gives students time and opportunities to familiarize themselves with the new English linguistic and cultural environment or lessen their learning difficulties, some day they should be able to successfully acculturated.

After ESL scholars are successfully acculturated into the English academic discourse, they may start their journey toward becoming a bilingual scholar in an English discourse with English as the major and their native language and culture as minor. This is called the third encounter when two acquaintances meet with each other: the ESL scholar and the English academic discourse. The third encounter has not been discussed in the research literature so much. In fact, the dynamic interaction between the bilingual scholars and the English academic discourse hasn't yet been adequately described. As a result, the lack of such discussion can yield the following questions: Will the communicative inequality be prevalent during this period? Will it always be the case when the ESL scholars can be understood word by word but ESL scholars cannot understand English speaking colleagues working with them? How to survive? Will there be a few lucky stories in which the ESL scholars are fortunate enough to be in a well-informed and open social discourse? Will there be some less lucky scholars who are permanently marginalized as outsiders and escape from the academic community or are rejected by it? These issues are waiting to be studied.

Rhetorical Features in Essays by U.S. Bilingual English Speaking College Students

One of the concerns in this study is that the U.S. participants were from Miami and most of them were bilingual. Whether the bilingual English speakers would utilize

English rhetorical conventions in their English writing could not be assumed at the beginning of the study. However, since bilingual college students from Miami are still U.S. college students and have been educated in United States, they should be included in this study. Therefore, by doing so, such research may broaden the horizons in contrastive and intercultural rhetoric by selecting bilingual participants, who have been educated in U.S. all through their school years. The rhetorical features manifested in their writing are worth being examined. Indeed, this has been a gap in contrastive and intercultural rhetorical studies. Through this study, some agreements as well as some discrepancies were discovered.

One outstanding feature manifested by U.S. participants is that a majority of the compositions made use of personal experiences and feelings to support the writers' claims. This phenomenon coincides with the rhetorical convention that a good composition should be closely related with the writer's personal stories so that, through the writing, the writer's personality could be reflected. Such composition—where the composition indicates close association with the writer—has been regarded as meaningful and truthful (Diederich, 1976). This phenomenon is also in alignment with principles in L1 writing in U.S. which highlighted voice, self-expression, creativity, and personal interpretation (Ramanathan & Atkinson, 1999).

Participants in this study explained their own feelings of telling truth or lies, their own experiences and stories, and their own professions. From their arguments, readers may be able to tell who the writer was and about his or her values and beliefs. These conspicuous values and beliefs in the importance of self seems in agreement with the English rhetorical convention that writing should be individual and personal.

The five-paragraph essay has been the rhetorical pattern highly recommended by writing teachers in the United States. Only a minority of the participants applied this pattern, most likely because this type of formalism was contradictory to their beliefs in individualism. Therefore, whether individualism or formalism was followed in the U.S. students' writing, one may state that the participants were following English rhetorical conventions. Though it was surprising to find two opposites coexisting in the same writing discourse, one may also state that the rhetorical convention held by this cultural discourse is the discursiveness or decentralization (Matsuta, 2003). Any discrepancies from the rhetorical conventions in this discourse would be tolerated and accepted as another supplement to the conventions and as a manifestation of rhetorical individualism.

Toulmin's model has been a widely accepted rhetorical convention. Its impacts can be found in the participants' compositions. Claims, data, and warrants could be recognized within them, and yet this model was still modified by individual writers. According to the rubric used to assess student essays, there should be claims and sub-claims. There should be different types of data. However, in the participants' compositions, there might be just one claim and only one or two types of data. Therefore, one might conclude, in this respect, that the participants in this study to some extent followed English rhetorical conventions; however, they also to some degree modified them. From this conclusion, one can infer that bilingual U.S. college students are also using English rhetorical conventions with their mild modifications.

Contributions to Theories of Argumentative Coherence, Second Language Writing and Contrastive Rhetoric

Coherence has been defined in the past 100 years (Lee, 2003), but it is still a complex concept beneath which the categories and subcategories should be explored further so that it can be defined in more securely and measured quantitatively. Cohesion theory helps examine coherence quantitatively, but it cannot illustrate coherence on the global level, or show the linkage between new information with the old information. Previous studies (e.g., Lee, I. 2002; Lee, M. Y. P. 2003; Liu & Braine, 2005) endeavored to define and illustrate the construct of coherence with reference to cohesion theory, but on the level of discourse and structure, not a theory like cohesion can be found to be operational for research studies.

In this study, such a less analyzable area within the construct of coherence was perceived by synthesizing five linguistic theories. These formulated a structural model to describe coherence on both paragraph level and text level. Theories in text linguistics, psycholinguistics, general linguistics and logic were selected to formulate the model. With this model, the construct of coherence is described on three different levels—form, content and logic—as opposed to Enkvist's three levels of cohesion, interpretability, and justifiability. The concept is also made concrete and measurable with the three indices by an interdisciplinary lens. Future studies can use this structural model of coherence to examine the empirical data obtained in the studies.

The association between culture and second language writing was examined, but this is, to my knowledge, the first time a researcher has formulated a conceptual model by synthesizing theories and related empirical studies, ultimately testing this model with

empirical data obtained in this study. Finally, the conceptual model was modified to specify the concept of culture in this model and the associations between three types of factors and 16 variables. Such a model, once again, testified that cultural factors are associated with second language writing by means of being associated with rhetorical and linguistic factors. The latter two factors are more closely and directly related with second language writing. Rhetorical patterns are thinking patterns used frequently by people in one cultural group. These thinking patterns are partially associated with their choice of words and they, reversely, are influenced by the cultural conventions they were nurtured in. Such a hierarchical categorization of factors associated with second language writing demonstrates the relationships between culture and writing. A grounded theory approach with both quantitative and qualitative methods enabled this theorization.

Contrastive rhetorical studies in Chinese and English context have been conducted for more than 40 years, but rhetorical patterns in eastern and western cultures have not been clearly specified since contrastive rhetoric spans over a number of disciplines, such as socio-cultural psychology, cognitive psychology, linguistics, cultural studies, rhetorical studies, and so on. For such an interdisciplinary field, contrastive rhetoric demands more time and energy to fulfill a well-developed study. Due to the task complexity, as well as cognitive and experience limitations of individual researchers, the findings by the studies were to some extent elusive. For example, the construct of coherence was not thoroughly analyzed so that the contrast was lacking in a solid analytical basis. Another issue: very often the contrast was not conducted in the same context. Ultimately, after reviewing literature in this field continually for two years, I haven't found a direct comparison between eastern and western rhetorical patterns

released in the contrastive rhetorical studies until recently I synthesized this contrast by reading widely, spanning over more basic disciplines as in philosophy and psychology.

With these tenets in mind, I offer the following contributions this study has made to the field of contrastive rhetoric:

1. Direct contrasts between Chinese and English rhetorical patterns have been conducted contextually;

2. A mixed methods approach added depth to traditionally quantitatively viewed research on coherence in second language learners' writing;

3. Chinese and U.S. college students' perceptions of rhetorical patterns used in argumentative writing have been identified—findings which have implications in terms of English writing instruction in China and the U.S.;

4. An integrative analytical model was utilized as the research lens;

Direct contrasts between Chinese and English rhetorical patterns have been conducted contextually. A direct contrast between Chinese and English rhetorical patterns has been conducted in a contextualized way. Not only were the patterns in the two cultures identified and distinguished from one another, but some apparent similarities were also analyzed to specify the respective functions each pattern may be capable of. For example, the five-paragraph essay pattern which resembled Hegel's dialectic of thesis, antithesis and synthesis was found to be similar to Chinese rhetorical pattern of *qichengzhuanhe* 起承转合. Through this contrastive study, this core piece of rhetorical knowledge was identified, which has been recognized as one of the main purposes for

any comparative cultural study. Additionally, another important purpose for such studies is that we may want to make our perceptions about the world more holistic by finding differences and then integrate those differences into our perceptions of the core knowledge. Therefore, in this study, aside from identifying the similarities, some differences in terms of the evolution of rhetorical patterns were respectively enunciated to find that the generation of rhetorical patterns was originated in different social contexts, which characterized them and made them appropriate for different topical contexts. As illustrated before, western rhetorical traditions excelled at fact finding while Chinese rhetorical patterns were drawn on to explain the relationships in the nature of the world.

The enrichment of research inferences initiated by the Whorfian Hypothesis was made from the perspective of contrastive rhetoric. Whorf held that language had important influences on human cognitions. Cognitive psychologists (Chiu, Leung & Kwan, 2007; Nisbette, 2003) submitted that the structural properties of a language do not rigidly determine thoughts: it is grammar and vocabulary that limit the tools available to speakers of the language for meaning construction and negotiation. This study offered a contextualized implication that rhetorical patterns constituted by grammatical and lexical devices to some extent shaped the writer's thinking in the writing. The influences from the rhetorical patterns were so explicit and direct, reflecting cultural preference and expectation and enabled by choices of syntax and lexicon.

A mixed methods approach added depth to traditionally quantitatively viewed research on coherence in second language learners' writing. A mixed methods approach was adopted in this study. In rhetorical studies, it has been recommended that

natural texts should be analyzed by following-up probing of in-depth interviews (Connor, 1996). However, the reality is that data were not analyzed in all possible ways: qualitative and quantitative due to the limitations of researchers' access to the natural textual data and participants. In this study, data were collected and analyzed in both qualitative and quantitative modes so that knowledge could be generated by triangulating its sources. Additionally, the qualitative part could also be considered as the qualitative validation of the statistical references obtained from research question 1 methodology. When differences were found, interviews were conducted to ask writers if they agreed that the differences were credible and how they would like to interpret the differences. Therefore, with a mixed method approach, both the triangulation strategy of research methods and the validation of quantitative results were integrated into the methodology, enhancing the overall validity of the study.

Chinese and U.S. college students' perceptions of rhetorical patterns used in argumentative writing have been identified—findings which have implications in terms of English writing instruction in China and the U.S.. Perception of rhetorical patterns used in Chinese and English speaking students' argumentative writing has been updated, which should be implicative to English writing instruction in China and U.S. Understanding students' thoughts in their writing can be facilitated by listening to their voices presented in this study. This study suggested that all the rhetorical choices should be made accessible to the students and let them choose in their writing. Leaving students unclear about other choices and dependent upon their own guessing about the other choices can be a bad option for writing teachers since rhetorical patterns are not just

thought patterns for writers to shape their writing, they are also analytical tools to be applied to get to know the world. Chinese students expect such explicit direction that a U.S. narrative emphasizing creativity over form may not be helpful. Likewise, U.S. students clearly missed canonized messages that teachers and researchers find important so that some extra direction might help those students who benefit from more meta-cognitive approaches to writing. Above all, with rhetorical patterns, it is possible for us to formulate more complex models to conceptualize our perceptions about the world; it's how we construct or conceptualize our thoughts of complexity and coherence.

The study also indicated that though all the rhetorical knowledge was supposed to be presented to the students, their perceptions and acquisition might be different due to their different cultural preference and expectations. It was inferred in this study that Chinese students might be more ready to acquire Toulmin's Model due to its congruence with Chinese conventional habits of thoughts that the causality of an event or phenomenon should be interpreted considering all the environmental and social factors, most likely making it easier for Chinese students to accept the knowledge in Toulmin's Model about data types. However, for U.S. students, the conventional habits of thought shaped their thoughts to be oriented with respect to themselves, a typical individualistic vision, so the data types might be more related with their feelings and emotions.

An integrative analytical model was utilized as the research lens. In previous studies, the conceptual analytical tools were usually one-dimensional, presented as a linguistic tool such as cohesion theory, a topical tool such as Topical Structure Analysis, or a logical tool such as Toulmin's Model. With such one-dimensional tools, we can only

make inferences in one dimension, leaving the interrelationship between the different dimensional evidence untouched. In this study, since a integrative analytical model was utilized as the research lens, the interrelationship between language, rhetorical patterns, culture and cognition was enabled to be elucidated, making the contrastive rhetorical analysis more holistic.

Discussion about Research Design and Methods

In contrastive rhetoric research, text analysis, either quantitatively or qualitative, has most often been utilized (Liu, 2007, for example), though, occasionally, interviews have been conducted (Chien, 2007). Based upon this knowledge, I designed the study with a qualitative intention. According to Creswell (2007), there are five traditions for a qualitative study to follow: narration, case study, grounded theory, ethnographic study, and phenomenological study. I chose grounded theory methodology. As for research methods, I adopted a quantitative comparative study method to compare the 16 variables across two groups' of students. Finally, I also conducted two correlational studies to examine the correlation among three indices to test and refine the conceptual model. Qualitative interviews were conducted to explore the subcategories of culture, rhetoric, and linguistic aspects. Qualitative explorations help modify the conceptual model in a deconstructive mode and justify to some extent that culture is associated with second language writing.

The following sections elaborate on methodological implications generated from the study process of research question formulation and research methodological alignment. These implications are about grounded theory with a mixed methods approach

to update a pre-established conceptual model at the stage of research question formulation. The implications also include how to get caring and serious participants for a study, how to understand paradigms in mixed methods research, and bilingual transcription of interview data from non-English speakers.

Mixed Methods: Design or Triangulation of Methods

The design of the study is complicated. The mixed-methods approach has been considered as a research design (Johnson & Christensen, 2008). And yet, it is also regarded as the application of triangulation strategy in a study as the approach was originally identified in 1960s when it was recognized as a strategy of triangulation of methods (Freankel & Wallen, 2009). If it is insisted that the mixed-methods approach is a design, then we can use a formula to show the design:

Design of qualitative studies + design of quantitative studies

The order of the two designs can be changeable. In the study, I had one qualitative comparative study, two correlational studies, and one qualitative study based on qualitative text analysis and qualitative interview data analysis. In this sense, the design of the study is

Quantitative + Qualitative + Quantitative

To my knowledge, researchers haven't discussed such a design very much. Theoretically, a study can be designed as a mixed methods study, and additionally, it can utilize a number of quantitative and qualitative methods in order to explore a number of conceptual relationships in the study. I would name the study design mixed methods. To relate this complex design to previous well-established research methodology, I would

like to describe the design as Concurrent analysis of the same QUAL data with two methods + Parallel mixed analysis

Concurrent analysis of the same QUAL data with two methods. This model of mixed methods involves quantifying the qualitative data by counting the frequencies of certain linguistic features or themes. Descriptive and inferential statistical procedures can be conducted to summarize the general trends presented in the qualitative data and make appropriate inferences about the population (Tashakkori & Teddlie, 1998). In this study, data of student essays were quantified by counting the frequencies of linguistic features, based upon which descriptive and inferential statistics was conducted to make inferential judgments about the characteristics of the population essays in terms of the specific linguistic features.

Parallel mixed analysis. In my dissertation study, after the previous mixed methods model followed another model of parallel mixed analysis, meaning parallel analysis of QUAL and QUAN data. In a study, the investigators collect both QUAL and QUAN data to triangulate data sources (Tashakkori & Teddlie, 1998). As far as this dissertation study, interviews were conducted to investigate the rationales for the significant differences inferred by the statistical data analysis.

Mixed methods design seems to be an appropriate choice for a study when, in order to obtain a theoretical framework, the research needs to go through a lengthy process with appropriate methods for the study context. In this sense, design is more overarching than triangulation of methods. On the other hand, the issue can be approached by defining and analyzing triangulation as a strategy in research. As early as 1959, triangulation was defined as the strategy of using an alternative method to validate

the results obtained with one method. In other words, it means the congruence of different methods to get the same results (Johnson, Onwuegbuzie, & Turner, 2007). Denzin (1978) defined triangulation as "the combination of methodologies in the study of the same phenomenon" (p. 291) and "outlined the following four types of triangulation: (a) data triangulation (i.e., use of a variety of sources in a study), (b) investigator triangulation (i.e., use of several different researchers), (c) theory triangulation (i.e., use of multiple perspectives and theories to interpret the results of a study), and (d) methodological triangulation (i.e., use of multiple methods to study a research problem)" (as cited in Johnson et al., 2007, p. 115).

In this outline, triangulation is still aimed at finding congruence or inconsistency or even contradictions among the results of studying one phenomenon or research problem by different methods.

Is a mixed methods approach using different methods to verify the research results? The answer should be: more than that! Triangulation was developed into mixing methods, or triangulation paved the way for people to understand the origin of mixed methods, but mixed methods approach is not triangulation since it is more than triangulation. Greene, Caracelli, and Graham (1989) outlined the following five purposes of mixed methods studies: "(a) triangulation (i.e., seeking convergence and corroboration of results from different methods studying the same phenomenon), (b) complementarity (i.e., seeking elaboration, enhancement, illustration, clarification of the results from one method with results from the other method), (c) development (i.e., using the results from one method to help inform the other method), (d) initiation (i.e., discovering paradoxes and contradictions that lead to a reframing of the research question), and (e) expansion

(i.e., seeking to expand the breadth and range of inquiry by using different methods for different inquiry components)" (as cited in Johnson et al., 2007, pp.115-116). From this outline, one can find that triangulation is only one of these five purposes of mixed methods approach.

In my study, I followed an overall design approach of mixed methods while examining research question 2 in order to inspect the association between three levels of coherence: cohesion, topical structures and Toulmin's Model. In question 3, correlational studies were conducted to verify the results obtained by qualitative interviews, which should be identified as applying the strategy of triangulation. In fact, this is a mixed methods study using 3 types of triangulation: triangulation of sources of data (textual and interview data), triangulation of theories (5 linguistic theories were utilized to study the construct of coherence), triangulation of methods of data analysis to study one research problem (qualitative interview data analysis and quantitative textual data analysis). Therefore, one might see here a distinction between a mixed methods approach and the strategy of triangulation. A mixed methods approach is the design of the study to answer both how and why questions in a complementary way while triangulation is the strategy to verify research results concerning one research problem, as far as this study is concerned. Therefore, the purposes of a mixed methods design in this study are the quantitative verification of the results of qualitative examination and the qualitative clarification of the quantitative research results.

Interpretation of inquiry paradigms

Paradigm has been such a puzzling word in research and brought about confusion in research inquiries. It demands the same attention in research inquiries as coherence in writing research. The definition of *paradigm* is also as elusive as that of *coherence*. Guba and Lincoln (1994) defined *paradigm* as "the basic belief system or worldview that guides the investigators, not only in choice of method but in ontologically and epistemologically fundamental ways" (p. 105). Guba and Lincoln called it *inquiry paradigm* since it undergirds research inquiries in ontological (nature of reality), epistemological (the relationship between the researcher and the researched), and methodological (choice of methods) dimensions. The basic beliefs or worldview have been formulated into four categories: positivism, post-positivism, critical theory and constructivism with reference to three components of inquiry paradigms: the ontological, epistemological and methodological questions (Guba & Lincoln, 1994).

The mixed methods approach as adopted in this study falls into the category of post-positivism, which proposed to contextualize the reality known by means of positivism by integrating both *etic* and *emic* perspectives and mixing both quantitative and qualitative methods in one study so that the implicit problems embedded in the quantitative approach may be to some extent overcome. In a study following post-positivism, individual voices will be heard in addition to a value-free objective perspective. The purpose of a post-positivism study is to testify the truthfulness of the theory in some certain contexts instead of verifying the truthfulness of theory in a general sense. Therefore, the application of the knowledge generated by post-positivism studies in a certain context or situation can be to some degree better warranted.

Explained above is the inquiry paradigm. From the research methodological literature, we can find other types of paradigms worthwhile to clarify in order to clear confusion of the researcher as well as the readers of this study. Another group of researchers (Johnson, Onwuegbuzie & Turner, 2007) identified three basic research paradigms: quantitative, qualitative, and mixed methods approaches, which they also called *methodological paradigms* since these paradigms primarily, concern basic methodological beliefs in research. Exploration, description, interpretation, explanation, and prediction belong to the sub-category of the *methodological paradigms*, which I would like to call research function paradigms, referring to the basic beliefs on research purposes. In this category, the paradigms can't be mixed. An exploratory study can't be predictive as well. However, a number of other researchers (Kaplan, 2010) would regard paradigm as a dialectical concept composed of qualitative and quantitative, monothetic and hermeneutic, or deductive and inductive. In this sense, paradigms are not contradictory but complementary to one another, and they can be mixed in a study. Silverman (2009) regarded the paradigm as a conceptual model based upon which a qualitative study can be designed, possibly called theoretical paradigms, which, according to Silverman (2009), are theory concepts (a concept which is also the designation of a theory) and lay the theoretical orientation for a qualitative study. Take the following levels of analysis in my dissertation research design as an illustration. This dissertation research design can be illustrated by referring to Silver's levels of analysis while doing qualitative research (Silver, 2009):

MODELS
A Model of Coherence for Argumentations

↓

CONCEPTS
Cohesion, Topical Structure, Toulmin Model

↓

THEORIES
Contrastive Rhetoric
Intercultural Rhetoric

↓

HYPOTHESIS
Is Coherence the Same in Intercultural Context?

↓

METHODOLOGY
Qualitative and Quantitative Mixed

↓

METHODS
Text Analysis and Interviews

↓

FINDINGS
What Causes the Differences or Similarities
in Coherence by Students from Different Cultures

Source: *Doing Qualitative Research (2009)* 3rd Edition, Silver D, London: Sage

Adapted from Silverman's framework of levels of analysis, the flowchart integrated the

dissertation study as an illustration of the abstract framework. In this illustration, the

theoretical paradigm was the coherence model composed by three theory concepts

(cohesion, topical structure and Toulmin's Model). From the flowchart and the

illustration, it can be inferred that a theoretical paradigm in Silverman's sense initiates a

deductive qualitative study.

Based on the analysis of all five types of paradigms—inquiry paradigms, methodological paradigms, research function paradigms, dialectical concept paradigms and theoretical paradigm—the association among them can be established as a hierarchical structure with inquiry paradigm at the higher level and the other four at the lower level since all the other four respectively fall into four components of inquiry paradigms. The four components are the methodology, research functions, research approaches, and theoretical orientation corresponding with the four paradigms: methodological paradigms, research function paradigms, dialectical concept paradigms and theoretical paradigm. By the analysis of different categories of paradigms, we can possibly understand the paradigm issue in a mixed methods study by properly locating our studies in the contexts of paradigms. Take my study as a case. The mixed methods paradigm of the dissertation inquiry was conducted by combining both quantitative and qualitative methods to explore the association between culture and writing by both inductive and deductive approach in the theoretical context of argumentative coherence.

Interviews and Bilingual Transcription

Since the Chinese participants are residing in China, interviews could not be conducted in person. They were substituted by questionnaires (Bogdan & Biklen, 2005) sent to students through e-mails. The questionnaires were sent to 30 students, 24 of whom returned responses by writing down their answers to the open interview questions. Such substitution of open question interviews by questionnaires may be preferable for some people who are in favor of electronic communication rather than person-to-person. Another advantage of such a substitution is that the informant can have enough time to

think over the questions and then respond to them. One of the participants in the study even had discussions with her roommates about the interview questions. If some follow-up questions were worthwhile to be probed, electronic communication can go on until the interviewer sees no need to probe. One prerequisite is that there must be trust and rapport between the interviewers and interviewees or the informant may stop communicating any time they like, and it would be difficult for the interviewers to get in contact with the informant again. Actually, such incidents may also happen in a personal interview. Therefore, this cannot be the reason to avoid electronic open question questionnaires.

Another issue with interviewing participants who are non-native English speakers is that what should be the language used in the interview. As a Chinese native speaker, I, as a researcher, found it convenient and comfortable to talk with Chinese participants in Chinese. But when I substituted interviews with questionnaires, the original English questions were kept, since this was a study about English writing and the Chinese participants were proficient enough in English to understand those simple English questions. In addition, they were asked to give their responses either in Chinese or English as they felt comfortable. In the end, only one participant said that he couldn't understand one of the English questions, and a few students responded bilingually. All the others answered the questions in Chinese.

When the informants' words were cited, what language should be used? I expected to be faithful to the original data; on the other hand, I needed to let readers in English understand the citations. My solution was to provide both the original citation and its translation in English. Such a strategy has been utilized by Saneh's dissertation (2009) when he interviewed international students from Iran about their experiences of academic English writing in Canadian universities. He provided both Iranian transcriptions and the translations in English to be faithful and at the same time to be communicative. It is a useful strategy for studies involving participants of non-native English speakers.

How to Get Serious and Caring Research Participants

One of the strengths of the study is that it is socially responsible in terms of data collection. The researcher didn't just ask participants to support the study by submitting compositions or being interviewed. Instead, a contest event was established with a writing prompt meaningful for the participants and close to their life. In this event, collecting data was just a side-effect. What the research expected to do was to engage participants in the study and arouse their interest in writing. I also expected that because of this event, they might feel more confident about their English writing. The topic of the writing prompt was decided upon after careful consideration. The topic should be universally concerned and meaningful to college students as well. Then "honesty" was chosen as the topic. In the end, it was found that the topic was interesting to some students who, under their professors' instruction, volunteered to submit the compositions, as part of their classroom English study tasks. They wrote with interest. They really

wanted to tell something to the reader. Their writing was accomplished as a serious endeavor. Thus, my lesson was this: to get people interested in the study, the study should be socially responsible in addition to its commitment to academic responsibility.

Limitations and Future Research Studies

One of the main purposes of the study was to construct a conceptual model to define coherence in a definite way. Such a purpose was achieved by synthesizing six linguistic theories: Halliday and Hasan's (1976) cohesion theory, Carroll's (1999/2007) theory of coherence, Enkvist's (1990) theory of coherence, Topical Structure Analysis (Lautamatti, 1978), Toulmin's Model (Toulmin, 1956/2003), and Coherence Relations (Wolf & Gibson, 2006). According to the process of testifying the truthfulness of proposed knowledge, composed of usually three steps of examining the representativeness of proposed features in reality, the consistency with implications of certain theories and the effectiveness in practice (Shand, 2009), the conceptual model of coherence has gone through two steps of knowledge verification: the study provided evidence that the variables in the model could be identified sufficiently from the natural language, i.e. students' English compositions, and it was also found that the inferences and tentative conclusions made from data analysis were in alignment with the theoretical implications of Contrastive Rhetoric. However, in order to get the model through the third step of verification, we need to experiment with the model in a classroom instructional setting. This is one of the limitations this study can't cope with. Therefore, I suggest that the effectiveness of embedding the conceptual model of defining coherence

into designing English writing curriculum and instruction should be examined by experimental and quasi-experimental approaches.

Several other limitations can be identified from the study. First of all, the samples in this study were from just two universities, one in China and the other in the U.S. They could not be representative of all populations, but populations under similar conditions. Future studies could involve selection of samples from different universities from different places with a large sample size.

Another limitation of this study is the inadequacy of implications in terms of the process of the dynamic social interactions in literacy learning and instruction. This is a study of contrastive and intercultural rhetoric. Mainly, it examined the static features of the text, without much consideration of the social discourse dynamic features in the process of literacy learning. The literacy activity in this study is to write a 300-word composition, not so complex as to bring about a very comprehensive process to be inspected. Actually, the students had some mental work to make rhetorical choices on the basis of their perceptions about the expectations from the discourse of the specific writing assignment. According to the interview data, they compared the Chinese rhetorical conventions and what they have learned about English rhetorical conventions. Based on their imagination of a prospective reader, they made their rhetorical choices. Some imagined that they were writing for an English speaking reader and English rhetorical patterns were followed in their composition. However, more of them took into consideration the institutional expectations from national college entrance examinations and the requirements given by their Chinese instructors in high schools. These expectations were so powerful that college students were still writing according to them

even though they were in higher education. Such a phenomenon may remind the tertiary curricular designers of the necessity to have tertiary disciplinary writing courses. The purpose of these courses is to substitute the institutional influence given by the national college entrance exams for tertiary disciplinary academic requirements to enhance the Chinese college students' academic writing capacity.

In order to obtain adequate implications for curriculum and instruction, a typical literacy study is a better choice, involving both text analysis and inquiries about the process of dynamic interactions among people and institutions. In this study, there was no communication between the students and the instructors since this was a static comparison between two cultural groups' writing, though some conflicts arose from different ideological and rhetorical choices in the students' minds. The negotiation between the instructor and the students can provide a snapshot of the discourse analysis concerning a certain literacy activities, and a richly described picture of the interplays between different discourse elements, such as beliefs, values and institutional rules and regulations prescribed by rubrics and exams of certification or qualifications. By doing so, modifications or innovations will be enabled if any improper factors exist in the process and hinder the progress of literacy learning. In view of this limitation, I suggest a study of a complex literacy task, for example, the dissertating process from proposing to writing up. Such a complex task can provide enough empirical data of texts and social interaction to investigate the theoretical framework illustrating a lengthy literacy negotiation. Intercultural rhetorical studies have been heading for this direction of inspecting rhetorical dialogism, merging its research horizons with new literacy studies.

Chapter IX

Epilogue

In the epilogue, two issues will be coped with since they emerged during the study process. They are not closely associated with the study focus, but they are worthwhile to be elaborated upon in the epilogue for the reason that one issue involved an implicit comparison between U.S. and China in terms of multicultural education from the intercultural rhetorical perspective. Multicultural education from the intercultural rhetorical perspective can be examined through texts produced by U.S. college students. Reversely, college students' texts can be interpreted with reference to the discourse of multicultural education in U.S. Such a perspective is generated from the comparison of rhetorical conventions manifested by essays studied in this research.

The other issue is how to locate the disciplinary orientation of this study. This issue arises from the complexity of the theoretical synthesis applied as the departure point of the research as well as the theoretical underpinnings for contrastive and intercultural rhetoric. With a number of theories in different disciplines involved in one study, it will be problematic to locate such a study in any one discipline. However, it is necessary to merge this research horizon with one discipline that can help to understand and assess this study holistically with regard to principles in that discipline.

Discrimination or Integration? --- Multicultural Education from College English Intercultural Rhetorical Perspective

Sleeter and Grant (1999) stated, in their second edition of the book entitled *Making Choices for Multicultural Education: Five Approaches to Race, Class, and Gender,* that among the five approaches to multicultural education in U.S., the best choice is the additive one, illustrated as $a + b = a_1 + b_1$ meaning when two cultures are integrated, both of them grow to be richer. Identified as the most idealistic multicultural education, it is not so easy to be carried out due to limitations of resources and human beings' knowledge about it. When a large number of research studies (Tedick, Christian & Fortune, 2011) were focused upon different ways and approaches to multicultural education, it appeared that few of them looked in retrospect and inspected the tracks studies had been on to see if there was any deviation from the right direction. It is not easy to discover the deviations if there isn't a reference to compare with. This can be one of the reasons for conducting a comparative study. From this dissertation comparative study, some deviations in U.S. multicultural education were identified—deviations less likely to be discovered without this comparison of coherence features in two groups' student essays. Actually, the discovery was made possible when Chinese writing conventions were examined and it was found that English rhetorical conventions had been adopted in Chinese curriculum and instruction, though Chinese people had never realized that that rhetorical convention was not originally Chinese; in other words, they learned it as knowledge, not as **others'** knowledge.

This otherness has been prevalent in U.S. multicultural education when isolated programs were recognized as global or international educational programs on all school

levels (Spack, 1997). When U.S. students exclaimed about how cool the isolated

programs were, they really alienated the knowledge from other cultures and, from that

moment, that knowledge has been labeled as *alien*, *other*, or honestly, *weird*. Before the

U.S. students knew what others were, they were taught clearly that those were others, not

theirs, when they really didn't mind if they were others or not. In this sense, U.S.

multicultural education has been actually making every effort to alienate others'

knowledge. It was only to be found out that the more efforts they made the worse

multicultural education was, which made a good case in alignment with Taoism's

advocacy that doing nothing is the best. If a formula is used to illustrate the real situation

in U.S. multicultural education, it should be a + b = -a –b, resulting from the competitions

between self and others.

A lesson learned from this study is how to embed others' wisdoms into one's own

culture without alienating them but adjusting it compatible to the new environment.

Toulmin's Model could be a good example to shed light upon how an item of wisdom

could be accepted and developed by different cultures. It is also expected that it can come

back to its home with enrichments and be accepted with the new horizons brought from

other cultures. Here is the track of the model's multicultural travels assumed from the

evidence collected in this study:

Due to the cultural closeness to Europe, Toulmin's Model first was exported to

Europe when it was used to be heuristic tool for research paper composing (Hegelund &

Kock, 2003). There, the denotation of *warrant* was developed to refer to the

methodological procedures of using *data* to justify *claim*, not just a rule or maxim as the

authoritative statement. In the early 20th century when U.S. was not ready to exert

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ideological influence to the world, Europe was the mainstream influence sweeping across Asia, especially China. Intellectuals from China studied in Europe and brought back western thoughts to China. Another summit of such tide was recognized in 1980s when translations of western thoughts were published and circulated widely in China. According to Shen (2002), all through the 20th century, Chinese linguistics was greatly developed by integrating theories and methodologies from Europe. Chinese phonological system, *Pinyin*, was the fruit of such integration; the first Chinese grammar book *Ma Shi Wen Tong* was another that adopted western grammar knowledge to generate rules in Chinese grammar. Possibly at this time, early or later, Toulmin's Model was introduced to China and embedded in Chinese writing instruction in high schools where students were taught how to write arguments with the model. In China, the denotation of *warrant* was developed to be the logical process of using data to support claim. When I studied the multicultural travel of Toulmin's Model, I actually brought back Toulmin's Model with a new version enriched by its multicultural travel. Another formula can be applied to illustrate this type of multicultural education: $a + b = a_1$.

In order to persuade readers of accepting this enriched version and embedding it into writing instruction, I need to elaborate upon another lesson learned from the study, more relevant to the area this study was oriented in: rhetorical conventions. In English rhetorical conventions, the relationship between a word and its immediate linguistic discourse was elaborated upon, but the topical and logical relationship among the words, the sentences, the paragraphs, and the whole essay was just ignored. The advantage of natural flow of ideas is that it can be locally coherent; nevertheless what about the global coherence? Thus, the disadvantage of natural flow is that the topical and logical

relationship between paragraphs is not taken care of. Concerning this issue, eastern rhetorical patterns did a better job by prescribing the relationship of paragraphs and its rhetorical functions in elaborating upon the discourse topic. Therefore, it should be wholesome if the eastern global discourse concerns are integrated with the natural flow manifested by English rhetoric. This is not just an issue of rhetoric but also an issue of epistemology. Will English speaking students tend to pay more attention to particulars or fragmentations, while eastern students may be more inclined to study in a holistic way, paying more attention to the meta-structural aspects?

The answer is positive according to the findings of this study. It is also the philosophical assumption that cultural and cognitive psychologists endeavored to test in their studies. If the philosophers, historians and anthropologists were correct, easterners tend to be holistic while westerners tend to be analytic. Using a cognitive lens, we can find out that it is scarcely possible for one to be holistic without being analytic as the basis. Without being analytical as the basis, being holistic means being hollow. It is also rarely possible for one to be analytic without being holistic. Without being holistic, it means the analysis doesn't make much sense since it has no goals or objectives. The aim to analyze is to generalize some common themes. Maybe, this is the problem that both Chinese and U.S. college students have been confronted with. The ultimate goal of the study is not to find the difference between two groups of students, but to find the ways to guide college students to be both analytic and holistic in their writing and problem-solving. Toulmin's Model was exported to Europe and Asia. It should be expected to come back more integrative to inform students of how to write with an updated model. It

is just like sending out intellectuals and expecting them to come back with more knowledge to serve the community.

It was not an easy job to embed others' knowledge into one's own. The implication generated by the study for integrating three facets of coherence into teaching EFL/ESL students' writing may be helpful to approach the issue raised here. The same simile needs to be mentioned for the second time: the process of the integration is like constructing a house; the blueprint of the house is Toulmin's Model; the framework of the construction is the topical structures, and the bricks are the grammatical and lexical devices. Let's adjust the simile into another case: multicultural education. The general goal of U.S. education is to nurture citizens with global and international perspectives, which is the blueprint; all levels of U.S. education are the framework of the house; others' knowledge should be the bricks that can be placed properly on different levels to achieve the goal of having global citizens, and the bricks come from studies conducted by the international study programs in higher education.

Disciplinary Orientation of the Study: College English Rhetoric

Studies of coherence have been oriented in the field of general linguistics, focusing upon lexical, grammatical, and semantic relationships. Such studies investigated one aspect of coherence (cohesion), the other aspects neglected due to restraints of theoretical underpinnings, which very probably was caused by the disciplinary boundaries. Scholars in general linguistics have been in a good position to study coherence from the perspective of general linguists. However, text linguists seemed to be in a better position since the mechanism of textualization is their study focus, and yet

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without knowledge foundations in general linguistics, studies of coherence seem to be a castle in the air. Therefore, the research calls for attention from general linguists and invites them to go through disciplinary boundaries and position themselves as the rhetoricians. In this way, they can qualify themselves to study coherence, such a rhetorical issue.

Drawing on the theoretical implications from this dissertation study, to study coherence, we need to consider the following theoretical horizons:

a) General linguistics

b) Text linguistics

c) Rhetorical logic

d) Psycholinguistics

e) Discourse analysis

f) Other related areas (to be continued)

Some researchers have considered coherence studies as discourse studies, but actually discourse denotes the research approach, not a research field or discipline. As a result, discourse analysis is one approach to coherence studies in the field of rhetorical inquiries. The definition of coherence and rhetoric coincided with each other, denoting that both were aimed at studying the communication between the reader and the writer on the interface of text. The targets for both studies are the text and the social interactions between the writer and the reader. Therefore, coherence studies should be located in rhetorical inquiries. The disciplinary orientation of this dissertation study is of rhetorical inquiries in college English writing, or college English rhetoric.

LIST OF REFFENCES

Achili, H (2007). Teaching coherence in writing: The case of second year students at the university of Mentouri, Constantine. (Unpublished doctoral dissertation), retrieved August 22, 2010 from http://www.umc.edu.dz/buc /buci/datum/theses /anglais/Achili.pdf

Ames, R. T. (1991). *Interpreting culture through translation*. Hongkong: The Chinese University Press.

Andriessen J., Baker M. & Suthers D. (2003) Argumentation, computer support, and the educational context of confronting cognitions. In *Arguing to Learn: Confronting Cognitions in Computer-Supported Collaborative Learning Environments* (Eds J. Andriessen, M. Baker & D. Suthers), pp. 1–25. Kluwer, Dordrecht, The Netherlands.

Atkinson, D. (2000). On Robert B. Kaplan's response to Terry Santos et al.'s "On the Future of Second Language Writing." *Journal of Second Language Writing, 9*, 317- 320.

Atkinson, D. (2004). Contrasting rhetorics/contrasting cultures: Why contrastive rhetoric needs a better conceptualization of culture. Journal of English for Academic Purposes, 3, 277-289.

Ayers, D. (2004) H. D., Ezra Pound and imagism. Blackwell Publishers. Retrieved Oct.05. 2009 from http://www.blackwellpublishing.com/content/BPL_Images/ Content_store/Sample_chapter/9781405108546/Ayers_sample%20chapter_moder nism.pdf

Bachman, L. F. (2004). *Statistical analyses for language assessment*. Cambridge: Cambridge University Press.

Bain, A. (1890). *English composition and rhetoric*. London: Longmans, Green.

Baker M.J. (1999) Argumentation and constructive interaction. In *Foundations of Argumentative Text Processing* (Eds J. Andriessen & P. Coier), pp. 179–202. University of Amsterdam Press, Amsterdam.

Baker, P (2010). Corpus methods in linguistic studies. In Litosseliti, L. (Eds). *Research methods in linguistics* (pp.68--92) London: Continuum.

Bakhtin, M. K. (1981). *The dialogic imagination*. Austin, TX: University of Texas Press.

Bakhtin, M. K. (1986). *Speech genres and other late essays*. Austin, TX: University of Texas Press.

Bamberg , B. (1984) Assessing coherence: A reanalysis of essays written for the National Assessment of Education Progress. *Research in the Teaching of English 18 3*, pp. 305–319.

Barkaoui, K. (2010) Do ESL Essay Raters' Evaluation Criteria Change with Experience? A Mixed-Methods, Cross-Sectional Study, *TESOL Quarterly*, Volume 44, Number 1, March 2010, pp. 31-57(27)

Berger, P. L., and Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City, NY: Doubleday.

Berlin, J. A. (1988). Rhetoric and ideology in the writing class. *College English*, 50,477-494.

Bloch, J. (2004). Second Language Cyber Rhetoric: A Study of Chinese L2 Writers in an Online Usenet Group, *Language Learning and Technology*, *8*, 66-82.

Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods*. Boston, Mass: Pearson, 5th edition.

Canagarajah, S. (2002). *Critical academic writing*. Ann Arbor, MI: The University of Michigan Press.

Carr, C.S. (1999). *The effect of computer-supported collaborative argumentation (CSCA) on argumentation skills in second-year law students*. Unpublished doctoral dissertation. The Pennsylvania State University, Pennsylvania.

Carroll, D. W. (1999, 2007). *Psychology of language*. Pacific Grove, CA: Brooks/Cole Pub.

Casanave, C. P. (1995). Local interactions: Constructing contexts for composing in a graduate sociology program. In D. Belcher and G. Braine (Ed.), *Academic writing in a second language* (pp. 83–110). Norwood, NJ: Ablex.

Cerniglia, C, Medsker, K., & Connor, U (1990). Improving coherence using computer-assisted instruction. In U. Connor and A. M. Johns (Eds.), *Coherence: Research and pedagogical perspectives* (pp. 227-241). Washington, DC: TESOL.

Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In Norman K. Denzin and Yvonna S. Lincoln (Eds.), *Handbook of qualitative research*, 2nd edition (pp.509-535). Thousand Oaks, CA. Sage.

Chen, J (2008). *An investigation of EFL students' use of cohesive devices*. Retrieved Aug, 22, 2010 from http://nutnr.lib.nutn.edu.tw/handle/987654321/7773.

Cheng, F (2010). A social-cognitive modeling to teach English argumentation. *The Asian ESP Journal*. Spring Edition, pp. 120-146.

Cheng. X & Steffensen, M. (1996), Metadiscourse: A technique for improving student writing. *Research in the Teaching of English.* 30 2, pp. 149–181.

Chien, S. C. (2007). The role of Chinese EFL learners' rhetorical strategy use in relation to their achievement in English writing. *English Teaching: Practice and Critique, 6*, 132–150.

Chiu, C, Leung, A & Kwan, L (2007). Language, cognition and culture: Beyond the Whorfian Hypothesis. In Kitayama, S., & Cohen, D (Eds.). *Handbook of cultural psychology*. New York: Guilford Press.

Cho. K.L. & Jonassen D.H. (2002) The effects of argumentation scaffolds on argumentation and problem solving. *Educational Technology Research and Development 50*, 5–22.

Christensen, F. (1963). A generative rhetoric of the paragraph. *College Composition and Communication*, 16, 144-156.

Cintron, R. (1993). Wearing a pith helmet at a sly angle, or, can writing researchers do ethnography in a postmodern era? *Written Communication, 10,* 371–412.

Clark, H. H., & Clark, E. V. (1977). *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt Brace Jovanovich.

Connor, U. (1984). A study of cohesion and coherence in English as a second language students' writing. *Papers in Linguistics: International Journal of Human Communication, 17,* 301-316.

Connor, U. (1987). Research frontiers in writing analysis. *TESOL Quarterly, 21*, 677-696.

Connor, U. (1990). Linguistic/rhetorical measures for international persuasive student writing. *Research in the Teaching of English, 24,* 67–87.

Connor, U. (1991). Linguistic/rhetorical measures for evaluating ESL writing. In L. Lyons (Ed), *Assessing second language writing in academic contexts*, (pp.215-226), Norwood, NJ: Ablex.

Connor, U. (1996). *Contrastive rhetoric: Cross-cultural aspects of second-language writing*. The Cambridge applied linguistics series. Cambridge [England]: Cambridge University Press.

Connor, U. (2002). New directions in contrastive rhetoric. *TESOL Quarterly, 36* (4), 493-510.

Connor, U (2004a). Contrastive Rhetoric: Old and New Directions. In Kassabgy, N and Ibrāhīm, Z and Aydelott, S (Eds.), *Contrastive rhetoric: issues, insights, and pedagogy* (pp.1-20). American University in Cairo Press.

Connor, U. (2004b). Intercultural rhetoric research: Beyond texts. *Journal of English for Academic Purposes. Special Issue on Contrastive Rhetoric in EAP, 3*(4), 291-304.

Connor, U., & Farmer, M. (1990). Teaching topical structure analysis as a revision strategy. In B. Kroll (Eds.), *Second language writing: Research insights for the classroom* (pp. 129–135). New York, NY: Cambridge University press.

Connor, U., & Lauer, J. (1985). Understanding persuasive essay writing: Linguistic/ rhetorical approach. *Text*, 5, 309-326.

Connor, U. & Lauer, J. (1988). Cross-cultural variation in persuasive student writing. In A. C. Purves (Ed.), *Writing across languages and cultures* (pp. 138-159). Newbury Park, CA: Sage.

Corbin, J. M. & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Los Angeles, Calif: Sage Publications.

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks: Sage Publications.

Crismore,A, Markkanen, R & Steffensen, M.(1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication 10*. 39–71.

Cumming, A. (1989). Writing expertise and second-language proficiency. *Language Learning, 39*, 81-141.

Danow, D. K. (1991). *The thought of Mikhail Bakhtin: From word to culture*. New York: St. Martin's Press.

Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: Praeger.

Denzin, N.K., & Lincoln, Y.S. (Eds.). (2003). Collecting and interpreting qualitative research (2nd ed.). Thousand Oaks, CA: Sage.

Derrida, J. (1976). *Of grammatology*. Baltimore: Johns Hopkins University Press.

Diederich, P. B., & National Council of Teachers of English. (1974). *Measuring growth in English*. Urbana, Ill: National Council of Teachers of English.

Dita, S (2009). Physical and Topical Structure Analysis of Professional Writing in Inner, Outer, and Expanding Circles of English. *TESOL Journal* , *1*, 95-118.

Eason, C. A. (1995). *Argumentative essays written by native speakers of Chinese and English: A study in contrastive rhetoric*. Unpublished doctoral dissertation. University of Illinois, Rubana-Champaign, IL.

Enkvist, N. E. (Ed.). (1985). Text linguistics and written composition [Special issue]. *Text, 5*(4).

Enkvist, N, E (1990). Seven Problems in the Study of Coherence and Interpretability. In U. Connor, and A. M. Johns, (Ed), *Coherence in writing: Research and pedagogical perspectives*. Alexandria, VA: TESOL.

Enkvist, N.E (1997). Why we need contrastive rhetoric. *Alternation 4*, 188–206.

Evensen, L. S. (Ed.). (1986). *Nordic research on text linguistics and discourse analysis*. Trondheim, Norway: University of Trondheim, Tapir.

Fagan, E. R., & Cheong P. (1987). Contrastive rhetoric: Pedagogical implications for the ESL teacher in Singapore. *RELC: A Journal of Language Teaching and Research in Southeast Asia, 18*, 19-31.

Feng, H.Y (2008). A genre-based study of research grant proposals in China. In Connor U., E. Nagelhout and W. V. Rozycki (Eds.). *Contrastive Rhetoric: Reaching to intercultural rhetoric*. (Pp.63-86). Amsterdam/Philadelphia: John Benjamins.

Firbas, J. (1986). On the dynamics of written communication in light of the theory of Functional Sentence Perspective. In C. Cooper and S. Greenbaum (Eds.), *Studying writing: Linguistic approaches* (pp. 40–71). Beverly Hills, CA: Sage.

Fishman, J. (1977) "The sociology of Language: Yesterday, Today and Tomorrow." In Cole, R.W (Ed), *Current Issues in Linguistic Theory*. Bloomington, IN: Indiana University Press. 51-75

Foucault, M. (1965). *Madness and civilization; A history of insanity in the age of reason*. New York, NY: Pantheon Books.

Fraenkel, J. R., & Wallen, N. E. (2009). *How to Design and Evaluate Research in Education* (7th Ed.). New York, NY: McGraw Hill.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Gao, L (2003). How to teach coherence by means of multimedia courseware (in Chinese), *Shandong Foreign Language Teaching, 06,*106-108.

Gao, L (2011). Investigating ESL Graduate Students' Intercultural Experiences of Academic English Writing: A First Person Narration of a Streamlined Qualitative Study Process. Scheduled for copy editing and publication in the Volume 17, Number 2 (March 2012) issue of The Qualitative Report.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Gauvain, M, Beebe, H & Zhao, S (2011): Applying the Cultural Approach to Cognitive Development, Journal of Cognition and Development, 12:2, 121-133

Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine Publications.

Glucksberg, S. (1988). Language and thought. In R. Sternberg & E. E. Smith (Eds.), *The psychology of human thought.* (pp.214-241) Cambridge, UK: Cambridge Univ. Press.

Goffman, E (1967). *Interaction Ritual*. Garden City, NY: Doubleday Anchor.

Goodenough, W.H. (1964). Cultural Anthropology and Linguistics. In Hymes, D (Ed.) *Language in Culture and Society: A Reader in Linguistics and Anthropology*. (pp. 36-39) New York: Harper and Row.

Grabe, W., and Kaplan, R. B. (1996). *Theory and practice of writing*. London: Longman.

Greene, J. C., Caracelli,V. J., & Graham,W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11,* 255-274.

Gross, A. G., & Walzer, A. E. (2000). *Rereading Aristotle's Rhetoric*. Carbondale, Ill: Southern Illinois University Press. http://www.netlibrary.com/urlapi.asp? Action =summary&v=1&bookid=45675.

Guba, E.G., & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London, UK: Longman.

Hayward, L. (1994). *Second language writers' processes, performance and perceptions in ESL composition.* Unpublished master's thesis, the University of British Columbia, Vancouver, Canada.

Heath, S.B. (1983). *Ways with words*. New York: Cambridge University Press.

Hegelund, S., & Kock, C. (2003). A good paper makes a case: Teaching academic writing the macro-Toulmin way. In L. A. Björk, (Eds.), *Teaching academic writing in European higher education: Vol. 12. Studies in writing.* Dordrecht, Netherlands: Kluwer Academic.

Heidegger, M (2010). *Logic: The question of truth.* (Translated by Thomas Sheehan). Bloomington: Indiana University Press.

Henrich, J., Heine, S.J., & Norenzayan, A. (2010). The weirdest people in the world? Behavioral and Brain Sciences, 33, 62–135.

Hinds, J. (1988). Reader vs. writer responsibility: A new typology. In A.C. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric*. (pp.124-140) Newbury Park, CA: Sage.

Hinds, J. (1990). Inductive, deductive, quasi- inductive: Expository writing in Japanese, Korean, Chinese, and Thai. In U. Connor and A. M. Johns (Eds.), *Coherence in writing: Research and pedagogical perspectives* (pp. 87-110). Alexandria, VA: TESOL.

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for the behavioral sciences* (5th ed.). Boston, MA: Houghton Mifflin.

Holliday, A. (1994). Appropriate methodology and social content. Cambridge, UK: Cambridge University Press.

Holliday, A. (1999). Small cultures. Applied Linguistics, 20, 237–264.

Holsti, O. (1969). *Content Analysis for the Social Sciences and Humanities*. Reading, MA: Addison-Wesley.

Hoenisch, S. (2004). The theory and method of topical structure analysis. Retrieved from http://www.criticsm.com/.

Hoey, M. (1983). *On the surface of discourse*. London: Allen and Unwin.

Hoey, M. (1991). *Patterns of lexis in text*. Oxford, England: Oxford University Press.

Hyland, K. (2003). Genre-based pedagogies: a social response to process. *Journal of Second Language Writing, 12*, 17–29.

Hymes, D. H. (1974). *Foundations in sociolinguistics; An ethnographic approach*. Philadelphia: University of Pennsylvania Press.

Hu, J. (2000). *Academic writing of Chinese graduate students in sciences and engineering: Processes and challenges. (*Unpublished doctoral dissertation), University of British Columbia, Vancouver, Canada.

Hu, J. (2009). Discovering emerging research in a qualitative study of ESL academic writing. *The Qualitative Report, 14*(4), 629-644. http://www.nova.edu/ssss/QR/ QR14-4/ hu.pdf

Hu, Z. (1994). *Discourse cohesion and coherence.* (In Chinese) Shanghai: Shanghai Language Teaching and Research Press.

Hu-chou, H. (2000). *Toward an understanding of writing in a second language: evidence and its implications from L2 writers of Chinese* (unpublished Doctoral dissertation). Harvard Graduate School of Education, Massachusetts.

Hunt, E. & Agnoli, F. (1991) The Worfian hypothesis: A cognitive psychology perspective. *Psychological Review, 98 (3).* 377-389.

Hunt, K.W. (1965). *Grammatical structures written at three grade levels*. Urbana, IL.: National Council of Teachers of English.

Ivanic, R. (1998). Writing and identity: The discoursal construction of identity in academic writing. Amsterdam: John Benjamins.

Jacobs, S. E. (1982). *Composing and coherence: the writing of eleven pre-medical students*. Linguistics and Literacy Series 3. Washington, DC: Center for Applied Linguistics.

Jenner, B., & Titscher, S. (2000). *Methods of text and discourse analysis*. London: Sage.

Johns, A. M. (1986). Coherence and academic writing: Some definitions and suggestions for teaching. *TESOL Quarterly, 20* (2), 247-265.

Johnson, R. B., & Christensen, L. B. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. Boston, MA: Allyn and Bacon.

Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133.

Kachru, Y (1983). Writers in Hindi and English. In A.Purves (Eds.), *Writing across languages and cultures: Issues in contrastive rhetoric*, 109-137. Newbury Park: SAGE.

Kaplan, R (1968). Contrastive rhetoric: Teaching Composition to the Chinese students. *Journal of English as a Second Language, 3*, 1-13.

Kaplan, R (1988). "Contrastive rhetoric and second language learning: Notes toward a theory of contrastive rhetoric." In A.C. Purves (Eds.) *Writing across languages and cultures: Issues in contrastive rhetoric.*(pp.275-304) Newbury Park, CA: Sage.

Kaplan, R. B. (2001). Foreword: What in the world is contrastive rhetoric? In C. G. Panetta (Ed.), *Contrastive rhetoric revisited and redefined* (pp. vii–xx).Mahwah, NJ: Lawrence Erlbaum.

Kaplan, R (2005). Contrastive rhetoric. In E. Hinkel (Eds.). *Handbook of research in second language teaching and learning* (pp.375-391). Mahwah, N.J.: L. Erlbaum Associates.

Kintsch,W. & van Dijk, (1978). Toward a model of text comprehension and production. *Psychological Review 85*, 363–394.

Knudson R.E. (1991) Effects of instructional strategies, grade and sex on students' persuasive writing. *Journal of Experimental Education 59*, 141–152.

Kong, K. (1998). Are simple business request letters really simple? A comparison of Chinese and English business request letters. *Text, 18*, 103–141.

Kuang, J. (1991). Rhyme-prose and eight-legged essay. *Literature, History, and Philosophy*, *5*, 68-74.

Kuhn, D. (1991). *The skills of argument.* Cambridge, UK: Cambridge University Press.

Langan, J. (1996). *College writing skills*. New York: McGraw-Hill.

Latour, B., & Woolgar, S. (1979). *Laboratory life: The social construction of scientific facts*. Sage library of social research, v. 80. Beverly Hills: Sage Publications.

Lautamatti, L. (1978). Observations on the development of the topic in simplified discourse. In N.E. Enkvist and V. Kohonen (Eds.), *Text linguistics, cognitive learning and language teaching* (Publications de l'Association finlandaise de linguistique appliquee No. 22) (pp. 71-104). Helsinki, Finland: Akateeminen kirjakauppa.

Lee, I. (2002). Teaching coherence to ESL students: a classroom inquiry. Journal of Second Language Writing, 11, 135-159.

Lee, M.Y.P. (2003). Discourse structure and rhetoric of English narratives: Differences between native English and Chinese nonnative English writers. *Text, 23*(3), 347–368.

Levon, E (2010). Organizing and processing your data: The nuts and bolts of quantitative analysis. In L. Litosseliti, (Ed), *Research methods in linguistics* (pp.68--92) London: Continuum.

Li, L & Gao, L (2003). *Comprehensive English handbook of CET 4*. Dalian Technology Institute Press.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Li, X. (2002). Track (dis)connecting: Chinese high school and university writing in a time of change. In D. Foster and D. Russell (Eds.), *Writing and learning in cross-national perspective: Transitions from secondary to higher education* (pp. 49-87). Mahwah, NJ: Lawrence Erlbaum.

Li, X. (2008). From contrastive rhetoric to intercultural rhetoric: A search for collective identity. In Connor U., E. Nagelhout and W. V. Rozycki (Eds.). *Contrastive Rhetoric: Reaching to intercultural rhetoric*. (Pp.11-24). Amsterdam/Philadelphia: John Benjamins.

Lin, Y.H. (1999). *The influence of cultural schemata on Chinese ESL students' writing*. Doctoral dissertation. University of South Dakota.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif: Sage Publications.

Lindeberg, A. (1985). Cohesion, coherence patterns, and EFL essay evaluation. In N.E. Enkvist (Ed.), *Coherence and composition: A symposium* (pp. 67-92). Abo, Finland: Research Institute of the Abo Akademi Foundation.

Liu, J (2007). Placement of the Thesis Statement in English and Chinese Argumentative Essays: A Study of Contrastive Rhetoric. *Electronic Journal of Foreign Language Teaching. 4*, No. 1, 122–139

Liu, M., & Braine G. (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System, 33*, 623-636.

Lloyd, G. E. R. (1996). Science in antiquity: The Greek and Chinese cases and their relevance to the problems of culture and cognition. In D. R. Olson & N. Torrance (Eds.), *Modes of thought: Explorations in culture and cognition* (pp. 15–33). Cambridge, UK: Cambridge University Press.

Lotman, Y. M. (1988). The semiotics of culture and the concept of a text. *Soviet Psychology*, *26*(3), 52–58.

Lotman, Y. M. (1990). *Universe of the mind: A semiotic theory of culture*. Bloomington: Indiana University Press.

Matalene, C. (1985). Contrastive rhetoric: An American writing teacher in China. *College English, 47* (8), 789-808.

Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. The Jossey-Bass higher and adult education series. San Francisco, CA: Jossey-Bass.

Messick, S. (1988). The once and future issues of validity: Assessing the meaning and consequences of measurement. In H. Wainer & H.I. Braun (Eds.), *Test validity* (pp. 33-45). Hillsdale, New Jersey: Lawrence Erlbaum.

Mohan, B, A., & Lo, W. A. (1985). Academic writing and Chinese students: Transfer and developmental factors. *TESOL Quarterly, 19* (3), 515-534.

Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently-- and why*. New York: Free Press.

Newman, I., Fraas, J., & Laux, J. M. (2000). A three-step adjustment procedure for Type I error rates. *Journal of Research in Education, 10*(1), 84-90.

Norenzayan, A., Choi, I., & Peng, K. (2007). Perception and cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 569 – 594). New York: Guilford.

Nussbaum. E.M. & Sinatra G.M. (2002) On the opposite side: argument and conceptual engagement in physics. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA.

Oh, S & Jonassent, D. H. (2007). Scaffolding online argumentation during problem solving. *Journal of Computer Assisted Learning*, 23, 95–110.

Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The Qualitative Report*, *13*(4), 695-705. Retrieved from http://www.nova. edu/ssss/QR/QR13-4/ortlipp.pdf

Oi, K. (1999). Comparison of argumentative styles: Japanese college students vs. American college students_ An analysis using the Toulmin's model. *JACET Bulletin, 30*, 85-102.

Oi, K., & Kamimura, T. (1997). A pedagogical application of research in contrastive rhetoric. *JACET Bulletin, 28*, 65-82.

Oliver, R. T. (1971). *Communication and culture in ancient India and China*. Syracuse, NY: Syracuse University Press.

Pinker, S. (1994). *The language instinct*. New York, NY: W. Morrow and Co.

Purves, A. C. (1988). *Writing across languages and cultures: Issues in contrastive rhetoric*. Newbury Park, CA: Sage.

Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly, 19*(2), 229-258.

Ramanathan, V., & Atkinson, D. (1999). Individualism, academic writing, and ESL writers. Journal of Second Language Writing, 8, 45–75.

Richards, J. (1990). *The language teaching matrix*. Cambridge, England: Cambridge University Press.

Roberts, R & Kreuz, R (1993). Nonstandard discourse and its coherence. *Discourse Processes 16*, 451–464.

Rosengren, K. E. (ed.) (1981). *Advances in Content Analysis*. Beverly Hills, CA: Sage.

Rubin, H. J., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks: Sage.

Ruszkiewicz, J. J., & Lunsford, A. A. (2004). *Everything's an argument*. Boston, MA: Bedford/St. Martin's.

Sanders J.A.,Wiseman R.L. & Gass R.H. (1994) Does teaching argumentation facilitate critical thinking? *Communication Reports* **7**, 27–35.

Saneh, N. (2009). Intercultural rhetoric in higher education: The case of Iranian students' textual practices in North American graduate schools. *ProQuest Dissertations and Theses,* n/a. Retrieved from http://search.proquest.com/docview/305128747?accountid=10901

Sasaki, M., & Hirose, K. (1996). Explanatory variables for EFL students' expository writing. *Language Learning 46*, 137-174.

Schneider, M. & Connor, U. (1991). Analyzing Topical Structure in ESL Essays. *Studies in Second Language Acquisition, 12*, 411-427 doi:10.1017/S0272263100009505

Scribner, S. & Cole, M. (1981). *The Psychology of literacy*. Cambridge, MA: Harvard University Press.

Seung, T. K. (1982). *Structuralism and hermeneutics*. New York, NY: Columbia University Press.

Shand, J. (2009). *Central issues of philosophy*. Chichester, U.K: Wiley-Blackwell.

Shen, F. (1989). The classroom and the wider culture: Identity as a key to learning English composition. *College Composition and Communication, 40* (4), 459-466.

Shen, J. (2002). *Preface to Principles of Language Learning and Teaching.* Beijing: Beijing Foreign Language Teaching and Research.

Shen, S., & Yao, H. (1999). The impact of Chinese culture on Chinese learners' use of English writing. *Proceedings of the 1999 International Symposium on Language Teaching Beijing-Kunming*. Beijing: Foreign Language University Press.

Silverman, D.(2009). *Doing qualitative research: A practical handbook*. 3rd edition. London: Sage.

Sleeter, C. E., & Grant, C. A. (1999). *Making choices for multicultural education: Five approaches to race, class, and gender*. Upper Saddle River, NJ: Merrill.

Smagorinsky, P. (2006). *Research on composition: Multiple perspectives on two decades of change*. New York: Teachers College Press.

Snively, H. (1999). *Coming to terms with cultural differences: Chinese graduate students writing academic English*. Doctoral dissertation. Harvard Graduate School of Education.

Spack, R. (1984). Invention strategies and the ESL college composition student. *TESOL Quarterly, 18,*649–670.

Spack, R. (1997). The rhetorical construction of multilingual students. *TESOL Quarterly, 31,* 765–774.

Sunderland, J. (2010). Research questions in linguistics. In Hancock and Mueller (Ed.), *The reviewer's guide to quantitative methods in the social sciences.* New York: Routledge.

Suthers, D. (1998). *Representations for scaffolding collaborative inquiry on ill-structured problems.* Paper presented at the 1998 AERA Annual Meeting, San Diego, California.

Suthers D. (2003) Representational guidance for collaborative inquiry. In *Arguing to Learn: Confronting Cognitions in Computer-Supported Collaborative Learning Environments* (eds J. Andriessen, M. Baker & D. Suthers), pp. 27–46. Kluwer, Dordrecht, The Netherlands.

Taborek, E., & Adamowski, E. (1984). To seal up one's mouth three times: understanding the education and linguistic differences that confront Chinese students in ESL writing class. *TESL Talk*, *15* (3), 88-95

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, Calif: Sage.

Tedick, D. J., Christian, D., & Fortune, T. W. (2011). *Immersion education: Practices, policies, possibilities*. Bristol: Multilingual Matters.

Tipton, S. (1987). *The effectiveness of topical structure analysis as a revision strategy for ESL writers.* Unpublished master's thesis, Ohio University, Athens, OH.

Toulmin, S. (1956, 2003). *The uses of argument*. Cambridge, U.K: Cambridge University Press.

Trimbur, J. (1989). Consensus and difference in collaborative learning. *College English 51*(6), 602-616.

Trochim, W. (2001). *The Research Methods Knowledge Base*, 2nd Edition. Cincinnati: Atomic Dog Publishing.

Varnum, M.E.W., Grossmann, I., Kitayama, S., & Nisbett, R.E. (2010). The origin of cultural differences in cognition: The social orientation hypothesis. *Current Directions in Psychological Science*, *19*, 9–13.

Voss, J.F., Lawrence, J.A., & Engle, R.A. (1991). From representation to decision: An analysis of problem solving in international relations. In R.J. Sternberg & P.A. French (Eds.), *Complex problem solving* (pp. 119– 157). Hillsdale, NJ: Lawrence Erlbaum Associates.

Wertsch, J. V. (1991). Voices of the mind: A social cultural approach to mediated action. Cambridge, MA: Harvard University Press.

Whorf, B. L. (1956). *Language, thought, and reality; Selected writings*. Cambridge, MA: Technology Press of Massachusetts Institute of Technology.

Wierzbicka, A. (2010). *Experience, evidence, and sense: The hidden cultural legacy of English*. Oxford: Oxford University Press.

Wilkerson, B.M. (1986). On the principles of coherence in English academic, expository prose. Unpublished paper, Meiji University, Tokyo, Japan.

Williams, J. M., & Colomb, G. G. (1993). The case for explicit teaching: Why what you don't know won't help you. *Research in the Teaching of English, 27,* 252–264.

Witte, S. P. (1983a). Topical structure and revision: An exploratory study. *College Composition and Communication*, *34,* 313-341.

Witte, S. P. (1983b). Topical structure and writing quality: Some possible text-based explanations of readers' judgments of students' writing. *Visible Language, 17*, 177-205.

Wolf, F., & Gibson, E. (2006). *Coherence in natural language: Data structures and applications*. Cambridge, Mass: MIT Press.

Writing Scoring Guide. Retrieved August, 23, 2011 from http://www.ets.org/toefl/pbt/ scores/writing_score_guide/

Yang, L, & Cahill D. (2008). The rhetorical organization of Chinese and American students' expository Essays: A contrastive rhetoric study. *IJES*, *8* (2), 2008, 113-132

You, Xiaoye (2005) Conflation of rhetorical traditions: the formation of modern Chinese writing instruction. *Rhetoric Review*, *24*, 150–169.

Young, W.L. (1994). *Crosstalk and culture in Sino-American communication*. New York, NY: Cambridge University Press.

Yu, G. (1999). *Yu yan zhe xue dui hua =: Yuyan zhexue duihua*. Beijing: Yu wen chu ban she.

Zamel, V. (1982). Writing: the process of discovering meaning. *TESOL Quarterly 16(2)*, 195-210.

Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly 17(2):*165-187.

Zhang, M. (2000). Cohesive features in the expository writing of undergraduates in two Chinese universities. *RELC Journal, 30(1),* 61-95.

Zhu, Y. (1997). An analysis of structural moves in Chinese sales letters. *Text, 17*, 543–566.

APPENDICES

Appendix A

Rubric on Writing in Band 4 and 6 College English Exams

Writing Task:

For this part, you are allowed 30 minutes to write a short essay entitled …. You should write at least 120 words. (15 points)

Rubric for teacher assessment:

scores	Assessment Standards
15-12 points	Well-structured and coherent, diversified syntax, rich vocabulary, correct sentence structure and choice of words, proper length.
11-9 points	Coherent, basically diversified syntax, no significant mistakes in sentence structures and choice of words, proper length.
8-6 points	Basically express the meaning clearly, a small number of mistakes in sentence structures and choice of words with a few big errors, proper length.
5-3 points	Coherent, understandable, but a small number of mistakes in sentence structures and choice of words with quite a few of big errors, basically proper length.
2-1 points	Basically related to the topic, but sentences are broken, with a few understandable.
0 points	Distract from the topic. Sentences are in disorder, impossible to

understand.

Chinese version of the rubric:

大学英语四六级考试作文评分标准

作文题满分为 15 分，具体评分标准如下：

14 分：内容符合要求，包括了提纲中的全部内容；语言流畅，层次分明，句式有变化，词汇丰富，句子结构和用词正确，文章长度符合要求。

11 分：内容符合要求，包括了提纲中的全部内容；文字连贯，句式有一定变化，句子结构和用词无重大错误，文章长度符合要求。

8 分：内容符合要求，包括了提纲中的多数内容；基本清楚地表达了其内涵，句子结构和用词有少量错误，个别是大错。文章长度符合要求。

5 分：内容基本切题，基本表达了提纲中的内容；文字连贯，语句可以理解，但有较多的结构和用词错误，且大错较多。文章长度基本符合要求。

2分：基本切题，但语句支离破碎，只有少数句子可以理解。

0 分：文不切题。只背了某篇文章，抄下来，或语句混乱，无法理解。

APPENDIX B

Compositions Written by Chinese College Students

Composition One adopted Chinese rhetorical conventions in 20th century, which was characterized by telling stories to argue as Li (2002) illustrated. Composition Two utilized the four-part Chinese rhetorical convention of *qi* 起 *cheng* 承 *zhuan* 转 *he* 合 inception, continuation, transition, conclusion organization of the 4-part essay.

Composition One (Telling Stories to Argue)

Honesty is the best policy

It was a winter afternoon; mom finished her work from the construction plant, returned home with her weary body, and asked her son: how was your final exam?

With an airy response, "Of course very excellent", she smiled with a little surprise.

With a rapid complementation, "I guess almost 90 scores", she smiled with wrinkles blooming like a chrysanthemum.

She looked at the thickened palms of her hand, then looked out of the window and thought in her mind: only if my son could study hard, no matter how tough and difficult the life was, I would keep going fearlessly.

She reached into her pocket and went to the market, but the nice dishes were so expensive. After some thinking, she bought half of the roast duck, and spent 15yuan, although she earned only 25yuan a day.

It was supper time; the son persisted in having supper while watching TV. Looking at her son gnawing the drumstick deliciously, she thought it was a wise decision to buy the half roast duck.

One week later, the son took his school report back home, and mom was excited to fetch his report. "65 scores", she said to herself and looked at her son. Disappointment, sadness, there were so many words in her eyes.

She felt regretful, as it was not the first time she was deceived by her son in this way. She looked up into the sky, as if she was seeing her husband in the heaven. Simultaneously, she cried loudly.

At that time, he understood.

Years later, her son was admitted into the Beijing University. He said: I would never break my mom's heart with my dishonesty, as I knew how sad she was when she was deceived by her beloved son.

Composition Two (*qi cheng zhuan he*)

Honesty is the best policy.

(**qi 起**) In the past, our ancestors slept with their doors open at night and never worried about whether there was a thief. What a harmonious and wonderful society it was! However, nowadays the world is full of material desires, and more and more people are used to telling lies. So people don't trust each other any more. It's fundamental and necessary to call back the position of honesty.

（**cheng 承**）First of all, honesty can bring us lots of opportunities to succeed. Under most circumstances, people would prefer to believe in honest persons. For instance, when you seek for a job, the interviewers will prefer to select the honest interviewees rather than the dishonest ones because they hold the idea that honest ones are more worthwhile trusting

It is said in a Chinese proverb that honesty is a magic medicine to make people relaxed. If someone is angry with you, you'd better tell the truth. Honesty can effectively relief his anger and he might forgive you, otherwise you're likely to bring trouble to yourself

(**zhuan 转**)Nevertheless, some people may point out that the world won't be fascinating if all people are honest. They firmly believe that the wonderfulness of the world requires dishonesty. However, you get excited when a journey starts, don't you? You feel delightful while seeing an excellent performance, don't you? So how can you deny that these could also make the world wonderful?

（**he 合**）We can never emphasize too much the importance of honesty. Not only can it pure our mind and improve ourselves, but it can also lead us to approach the goal of "harmonious society". It's the most valuable.

APPENDIX C

Analyzing a Composition by a Native English Speaker with the Three Indices

The cohesive devices in this composition will be marked according to the following table.

Categories of Cohesion

Category	Example
Reference	
Pronominal (1)	The woman lost track of her little boy at the mall. *She* became very worried.
Demonstrative (2)	*That* was the worst exam I had all term.
Comparative (3)	It's the *same* band we heard last week.
Substitution (4)	My computer is too slow. We need to get a faster *one*.
Ellipsis (5)	I wish I had more talent. My sister has a lot *more* than I do.
Conjunction(6)	Melissa flunked out of school, so she is looking for a job.
Lexical	
Reiteration (7)	I saw a boy win the spelling bee. The *boy* was delighted afterward.
Synonymy (8)	I saw a boy win the spelling bee. The *lad* was delighted afterward.
Hyponymy(9)	I saw a boy win the spelling bee. The *child* was delighted afterward.

Source: *Psychology of Language*, by David Carroll, 1999, 2007

Honesty is the Best Policy

Honesty is the best policy is something we are taught from the time we are little children
         3   1   2   1
all the way through adulthood. Our parents have told us, our teachers have told us and so
   2   1   1 1   7   1 6 5
has our pastor at church. But is it really? Is there ever a time when honesty is not the
   1   6   1   6
best policy? Is it best to be honest although it may upset another person or hurt their
3   1 3   6   1   6   1
feelings?

The guideline of "honesty is always the best policy" is prominent in the Bible and the
2   2   3   2   2
Christian faith because of the Ten Commandments. "Thou shall not lie" is essentially a
                  2

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"rule" handed down by a "higher authority." As Christians, we are supposed to accept this
                                                       1   2

rule and follow it without question.
7   6   1

There is also a situation which we should consider. What if there was a situation where
                            6   1   6   6

you had to be dishonest to save yourself or someone else when that person is innocent.
1   1   6 1   6   2

Speaking a lie may not come under 'Dishonesty' as we are not doing anything wrong.
                         7   6 1

Thus, it depends entirely on the situation, and intelligent people realize and know how to
6   1   2   7   6   6   6

deal with a difficult situation by not compromising on their principles and ideals.
              7   1   6   8

At times absolute honesty may be difficult. It may even hamper progress and
                7   1   6

development. Can a doctor casually tell her terminally ill patient that there is no chance
                     1   6

of survival? Is there a time when honesty needs to heed to discretion? Honesty needs to
           6   7   7   7

be kept in mind because there is cause and effect relationship in this world. One lie can
       6   6   2

turn into several lies quickly!! Honesty to oneself is indeed the best policy!
       7   7   1   3

Summary of the frequencies of cohesive devices in the composition

Categories	*Codes*	*frequencies*
Pronominal reference	1	23
Demonstrative reference	2	11
Comparative	3	5
Substitution	4	0
Ellipsis	5	1
Conjunction	6	22
Reiteration	7	11
Synonymy	8	1
Hyponymy	9	0

Topical Structures in this composition can be analyzed as follows:

<u>Honesty is the Best Policy</u>

Honesty is the best policy is something we are taught from the time we are little children all the way through adulthood. Our parents have told us, our teachers have told us and so has our pastor at church. But is it really? Is there ever a time when honesty is not the best policy? Is it best to be honest although it may upset another person or hurt their feelings?

The guideline of "honesty is always the best policy" is prominent in the Bible and the Christian faith because of the Ten Commandments. "Thou shall not lie" is essentially a "rule" handed down by a "higher authority." As Christians, we are supposed to accept this rule and follow it without question.

There is also a situation which we should consider. What if there was a situation where you had to be dishonest to save yourself or someone else when that person is innocent. Speaking a lie may not come under 'Dishonesty' as we are not doing anything wrong. Thus, it depends entirely on the situation , and intelligent people realize and know how to deal with a difficult situation by not compromising on their principles and ideals.

At times absolute honesty may be difficult. It may even hamper progress and development. Can a doctor casually tell her terminally ill patient that there is no chance of survival? Is there a time when honesty needs to heed to discretion? Honesty needs to be kept in mind because there is cause and effect relationship in this world. One lie can turn into several lies quickly!! Honesty to oneself is indeed the best policy!

T-Units	Topics	Progression Types
1	Honesty	
2	Something	1
3	So	1
4	it	1
5	a time	2
6	it (to be honest)	3
7	The guideline	2
8	a "rule"	1
9	this rule	1
10	a situation	2
11	a situation	1
12	Speaking a lie	2
13	the situation	1
14	a difficult situation	1
15	Absolute honesty	2
16	It	1
17	a doctor	2
18	a time	*1*
19	Honesty	3
20	One lie	2
21	Honesty to oneself	*3*

_____

T-units: the minimal terminable unit .
1. Paralleled Progression;   2. Sequential Progression;   3. Extended progression
1. 3 false paralleled progression. In 1,it appears to be paralelling, but actually, they are inversed sequential. In 3. it appears to be extended, but T-unit 21 is not paralelling with T-unit 19.

This composition can also be analyzed according to Toulmin's Model as Follows:

<u>Claim</u>

<u>Data</u>

<u>Warrant</u>

<p style="text-align:center;"><u>Honesty is the Best Policy</u></p>

<u>*Honesty is the best policy* is something we are taught from the time we are little children all the way through adulthood.</u>(***Claim***) Our parents have told us, our teachers have told us and so has our pastor at church. But is it really? Is there ever a time when honesty is not the best policy? Is it best to be honest although it may upset another person or hurt their feelings?

<u>The guideline of "honesty is always the best policy" is prominent in the Bible and the Christian faith because of the Ten Commandments. "Thou shall not lie" is essentially a "rule" handed down by a "higher authority."</u>(***Data from authority***<u>) As Christians, we are supposed to accept this rule and follow it without question</u>. (***Warrant***)

There is also a situation which we should consider. What if there was a situation where you had to be dishonest to save yourself or someone else when that person is innocent. Speaking a lie may not come under 'Dishonesty' as we are not doing anything wrong.(E***motional appeal***) <u>Thus, it depends entirely on the situation, and intelligent people realize and know how to deal with a difficult situation by not compromising on their principles and ideals.</u> (Proposition)

At times absolute honesty may be difficult. It may even hamper progress and development.(***Inferential ground***) Can a doctor casually tell her terminally ill patient that there is no chance of survival? (***Emotional appeal***) Is there a time when honesty needs to heed to discretion? <u>Honesty needs to be kept in mind because there is cause and effect relationship in this world.</u> (***Warrant***) One lie can turn into several lies quickly!! <u>Honesty to oneself is indeed the best policy</u>! (***Claim***)

APPENDIX D

An Example of Eight-legged Essay

If the People Do Not Have Enough, How Can the Ruler Have Enough?
Wang Ao (Ming Dynasty)

When the people have wealth below, the ruler naturally will have wealth at the top. For the wealth of the ruler is one that is stored among the people. If the people possess wealth, how can the ruler have any reason to be poor alone?

By way of scolding Duke Ai, You Ruo asserted emphatically that the ruler and the people are a single entity. He said, "You have increased your taxes because you do not have enough for your needs. If you want to satisfy your own needs, why not first satisfy those of your people?

In truth, one can "tax 100 mou" and constantly economize and maintain an attitude of humanness. To take one-tenth in taxes is not to maltreat the people for selfish purposes. Therefore, what the people's labor produces will not be jeopardized by tax demands nor will the wealth of the people be exhausted by exorbitant taxes. Within the villages they will store up goods and those who "support parents as well as wives and children" will be without care. In the suburbs and in the country, produce will pile up to the thatch and beams of the houses, and those who "nourish life and provide fitting deaths" will be without regret. If the people are provided for, how can the ruler alone be poor?

If the wealth is stored in the villages, the ruler may obtain it and have use of it. He will not need to place it in the treasury and later call it his own. If it is stored in the suburbs and country, the ruler may obtain it and have use of it. It will not be necessary to have it stored up in the granaries and later say that he owns it, If one taxes without causing poverty, how can one worry about making a demand and not seeing it met? If one has used wealth without exhausting it, how can one be distressed that a moment might come for which one is not prepared? Sacrificial animals and new millet are sufficient for sacrificial offerings. Jade, silk, and round and square bamboo chests are sufficient expenditures on audiences with the ruler or for intercourse among feudal lords. Morning and evening meals are sufficient for entertaining guests. Armament for vehicles and horses are sufficient for military expeditions. If one says there is not enough, the common people have something and will give of it. Who, then, will be concerned about insufficiency?

Therefore, if taxation laws are established for the good of the people, the government will have sufficient for its needs, and for this reason, why should you increase taxes in order to get rich?

(Retrieved July, 2010 from http://www.wlu.edu/~hhill/baguwen.html)

APPENDIX E

Examples of Chinese Rhetorical Delicacies and Intricacies

Chinese ancient poems, though with only 20 to 40 Chinese characters are very powerful to convey meanings while arguing (persuading), exposing, praising and expressing the poets' emotions by means of analogy, personification, metaphor , oxymoron and symbolism, etc. Here are 2 examples that respectively adopt the rhetorical devices listed above.

<div align="center">

七步诗

煮豆燃豆萁，

豆在釜中泣。

本是同根生，

相煎何太急！

</div>

(*This poem made use of **analogy** to **persuade** people of brotherhood not to kill each other. It says that the beans' stems are burned to boil the beans. The beans are crying in the pot: "We were growing on the same roots. How could we kill each other?"*)

<div align="center">

画

远看山有色，

近听水无声。

春去花还在，

人来鸟不惊。

</div>

(*This poem made use of **Paradox** to tell a riddle. The title of the riddle is the key. The poem says that when you are far away, the mountain is colorful; when you get closer, you can't hear the running water make any noise. Thought Spring has gone, the flowers are still there. The birds can never be frightened away. The key of the riddle is "Picture".*)

The Writing Prompt for the Study

Please write a composition entitled "Honesty is the best policy" with about 300 words. You can agree or disagree with the statement. Please justify your position.

APPENDIX G

Rubric

The following scoring guidelines relate to the TOEFL® (2009) PBT Writing section (Writing Scoring Guide).

Score of 6
An essay at this level:
effectively addresses the writing task
is well organized and well developed
uses clearly appropriate details to support a thesis or illustrate ideas displays consistent facility in the use of language
demonstrates syntactic variety and appropriate word choice

Score of 5
An essay at this level:
may address some parts of the task more effectively than others
is generally well organized and developed
uses details to support a thesis or illustrate an idea
displays facility in the use of the language
demonstrates some syntactic variety and range of vocabulary

Score of 4
An essay at this level:
addresses the writing topic adequately but may slight parts of the task
is adequately organized and developed
uses some details to support a thesis or illustrate an idea
demonstrates adequate but possibly inconsistent facility with syntax and usage may contain some errors that occasionally obscure meaning

Score of 3
An essay at this level may reveal 1 or more of the following weaknesses:
inadequate organization or development
inappropriate or insufficient details to support or illustrate generalizations
a noticeably inappropriate choice of words or word forms
an accumulation of errors in sentence structure and/or usage

Score of 2
An essay at this level is seriously flawed by 1 or more of the following weaknesses:
serious disorganization or underdevelopment
little or no detail, or irrelevant specifics
serious and frequent errors in sentence structure or usage
serious problems with focus

Score of 1
An essay at this level:
may be incoherent may be undeveloped
may contain severe and persistent writing errors

Score of 0
An essay will be rated 0 if it:
contains no response
merely copies the topic
is off-topic, is written in a foreign language or consists only of keystroke characters

APPENDIX H

Interview Protocol

The following interview questions were derived from literature review in Chapter 3. According to the review, ESL students' English writing was found to be associated with the students' L1 culture, composing of cultural conventions, rhetorical conventions and classroom culture (Snively, 1999). According this three-factor framework, the interview protocol was produced. Specific questions were invented by the researcher in order to explore the specific association between culture and ESL writing.

Interviewing Chinese Students

下面是几个有关英语写作的问题，请你用汉语回答。回答没有正误之分，尽量详细说明。这对我的有关英语写作的研究会大有帮助。谢谢！

Rhetorical Factors:

1. How do you organize your argumentative essays?

2. What Chinese and English rhetorical conventions do you know?   How did you know them? Did you use them in your compositions?

3. How were you expected to write in Chinese and in English by your Chinese and English teachers?

4. What is good English writing in your eyes? What is good Chinese writing in your eyes? What differences can your identify between the two sets of standards?

Cultural Factors:

5. How are you taught to write coherently in Chinese and English?

6. Do you write according to the writing instructions you were given at previous schools? What writing instructions were you given to write argumentative essays in Chinese and English respectively?

7. Do you think Chinese culture impacts your English writing? Have you found any difference between your Chinese compositions and English compositions? Or for Chinese writing and English writing in general?

Linguistic Factors:

    8.   When you write in English, what are the linguistic difficulties you often have? How do you overcome them? Can you overcome all of them?

    9.   What are the most difficult things for you to learn writing in English? Using pronouns, verbs, verbal phrases, prepositions, tenses or clauses? What problems are identified in your writing by your teachers or professors?

Rhetorical patterns

    In the collection of winning compositions, several rhetorical patterns were used. Among them, some are Chinese rhetorical patterns, such as 起承转合，夹叙夹议，讲故事作议论，散文式的议论。 Some are English rhetorical patterns, such as claim (论点), data（论据） and warrant（论证），正论与驳论。 Which types do you like better, the Chinese ones or the English ones? Why so?

Interviewing U.S. Students

1. How were you taught to write argumentative essays in middle or high school or higher education in U.S.?

2. Are there some rhetorical patterns to follow in argumentative composition?

3. Do you know Claim, Data and Warrant? How were you taught concerning the three elements?

4. What is good argument according to your writing instructors? Do you agree? What do you think about it?

5. What are the linguistic requirements for a good argumentative essay?

6. Did you learn how to write argumentative essays from other sources? What do you think about them?

7. Do you know argumentative writing in other cultures? What do you think the rhetorical patterns of argumentation in that culture? Do you think it is persuasive to you?

8. Generally speaking, in your opinion, what should good English writing look like?

Appendix I

Dear all,

I am doing data analysis for my dissertation. In order to enhance reliability of the study, your help is requested to assess 6 compositions according to the instructions below. This study is about contrastive rhetoric to compare essays written by Chinese college students and their U.S. peers.

Here are the instructions for assessing the compositions. There are three sections:

Section 1: Cohesion

The frequencies of different cohesive devices are counted. The cohesive devices and their definitions can be found from the following table:

Categories of Cohesion

Category	Example
Pronominal	The woman lost track of her little boy at the mall. *She* became very worried.
Demonstrative	*That* was the worst exam I had all term.
Comparative	It's the *same* band we heard last week.
Substitution	My computer is too slow. We need to get a faster *one*.
Ellipsis	I wish I had more talent. My sister has a lot *more* than I do.
Conjunction	Melissa flunked out of school, so she is looking for a job.
Reiteration	I saw a boy win the spelling bee. The *boy* was delighted afterward.
Synonymy	I saw a boy win the spelling bee. The *lad* was delighted afterward.
Hyponymy	I saw a boy win the spelling bee. The *child* was delighted afterward.

Source: Psychology of Language, by David Carroll, 1999, 2007

Further explanations of the 9 cohesive devices were also included:

- Pronominal reference refers to all the personal pronoun categories: e.g., *I, me, my, mine, myself*

- Demonstrative reference refers to all the demonstrative words such as *this*, *that*, *those*, *these*, and *the*.
- Comparative reference refers to all the comparative and superlative words such as *more important*, *most important*, *faster*, and *fastest*.
- Conjunctions refer to all the linking words such as *and*, *so*, *but*, *when*, *however*, etc.

Finally, I attached an example of data analysis, followed by the implementation of

a count chart with respect to numbers of times each cohesive device was

encountered:

<u>Honesty is the Best Policy</u>

Honesty is the best policy is something we are taught from the time we are little children

       3   1   2   1

all the way through adulthood. Our parents have told us, our teachers have told us and so

  2   1   1 1   7   1 6   5

has our pastor at church. But is it really? Is there ever a time when honesty is not the

   1   6   1   6

best policy? Is it best to be honest although it may upset another person or hurt their

 3   1 3   6   1   6   1

feelings?

The guideline of "honesty is always the best policy" is prominent in the Bible and the

2   2   3   2   6 2

Christian faith because of the Ten Commandments. "Thou shall not lie" is essentially a

                 2

"rule" handed down by a "higher authority." As Christians, we are supposed to accept this

                     1   2

rule and follow it without question.

7   6   1

There is also a situation which we should consider. What if there was a situation where

        6   1   6   6

you had to be dishonest to save yourself or someone else when that person is innocent.

1   1   6 1   6   2

Speaking a lie may not come under 'Dishonesty' as we are not doing anything wrong.

                 7   6 1

Thus, it depends entirely on the situation, and intelligent people realize and know how to

6   1   2 7   6   6   6

deal with a difficult situation by not compromising on their principles and ideals.

       7   1   6   8

At times absolute honesty may be difficult. It may even hamper progress and

       7   1   6

development. Can a doctor casually tell her terminally ill patient that there is no chance

                          1   6

of survival? Is there a time when honesty needs to heed to discretion? Honesty needs to

             6   7   7   7

be kept in mind because there is cause and effect relationship in this world. One lie can

           6   6   2

turn into several lies quickly!! Honesty to oneself is indeed the best policy!

         7   7   1   3

Summary of the frequencies of cohesive devices in the composition

Categories	*Codes*	*frequencies*
Pronominal reference	1	23
Demonstrative reference	2	11
Comparative	3	5
Substitution	4	0
Ellipsis	5	1
Conjunction	6	22
Reiteration	7	11
Synonymy	8	1
Hyponymy	9	0

Finally, raters were asked to fill in their results with respect to each of the

six compositions they examined, using the following form:

Please count the frequencies of each cohesive device and fill in the table with your results.

Summary of the frequencies of cohesive devices in the 6 composition

Categories	*Codes*	*Frequencies*					
		Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
Pronominal reference	1						
Demonstrative reference	2						
Comparative	3						
Substitution	4						
Ellipsis	5						

Conjunction	6						
Reiteration	7						
Synonymy	8						
Hyponymy	9						

Section 2. Topical progression.

There are 3 types of topical progression. The definitions and examples can be found in the following table:

Topical Progression

Topical progression	Definition	Conceptual representation	Example
Parallel progression *Code:* **1**	topics of successive sentences are the same, producing a repetition of topic that reinforces the idea for the reader	<a, b>, <a, c>, <a, d>	At times absolute **honesty** may be difficult. **It** may even hamper progress and development. **Honesty** needs to be kept in mind because there is cause and effect relationship in this world.
Sequential progression *Code:* **2**	topics of successive sentences are always different, as the comment of one sentence becomes, or is used to derive, the topic of the next	<a, b>, <b, c>, <c, d>	Although there is are **times** when you must say the partial truth. **Most times** the social rules we have stop us from sharing what we truly believe. **Sensitive issues sometimes** require us to fib from time to time.
Extended parallel progression *Code:* **3**	the first and the last topics of a piece of text are the same but are interrupted with some sequential progression	<a, b>, <b, c>, <a, d>	I live my life by **being brutally honest**. If I am asked a question I will answer truthfully. Although there is are times when you must say the partial truth. Most times the social rules we have stop us from sharing what we truly believe. Sensitive issues sometimes require us to fib from time to time. So is **honesty** always the best way to go?

Please first identify the four types of topical progression from the compositions and then count the frequency of each type. Here is an example:

Honesty is the Best Policy

Honesty is the best policy is something we are taught from the time we are little children all the way through adulthood. Our parents have told us, our teachers have told us and so has our pastor at church. But is it really? Is there ever a time when honesty is not the best policy? Is it best to be honest although it may upset another person or hurt their feelings?

The guideline of "honesty is always the best policy" is prominent in the Bible and the Christian faith because of the Ten Commandments. "Thou

shall not lie" is essentially a "rule" handed down by a "higher authority."
As Christians, we are supposed to accept this rule and follow it without
question.

There is also a situation which we should consider. What if there was a
situation where you had to be dishonest to save yourself or someone else
when that person is innocent. Speaking a lie may not come under
'Dishonesty' as we are not doing anything wrong. Thus, it depends entirely
on the situation , and intelligent people realize and know how to deal with
a difficult situation by not compromising on their principles and ideals.

At times absolute honesty may be difficult. It may even hamper progress
and development. Can a doctor casually tell her terminally ill patient that
there is no chance of survival? Is there a time when honesty needs to heed
to discretion? Honesty needs to be kept in mind because there is cause and
effect relationship in this world. One lie can turn into several lies quickly!!
Honesty to oneself is indeed the best policy!

Implementing the 1-2-3 coding above, topical progression can be analyzed
as:

T-Units	Topics	Progression Types
1	Honesty	
2	Something	1
3	So	1
4	it	1
5	a time	2
6	it (to be honest)	3
7	The guideline	2
8	a "rule"	1
9	this rule	1
10	a situation	2
11	a situation	1
12	Speaking a lie	2
13	the situation	1
14	a difficult situation	1
15	Absolute honesty	2
16	It	1
17	a doctor	2
18	a time	*1*
19	Honesty	3
20	One lie	2
21	Honesty to oneself	*3*

Please note the following issues regarding false paralleled progression:

**In 1, it appears to be paralleling, but actually, they are inversed sequential. In 3. it
appears to be extended, but T-unit 21 is not paralleling with T-unit 19.**

Finally, an example chart showing how raters could tally their results was

offered:

Topical Progression	Codes	Frequencies
Paralleled Progression	1	10
Sequential Progression	2	7
Extended progression	3	3
T-Units		20

Raters were then asked to fill in their results, using the following chart, with respect to

their six compositions.

Summary of frequencies of three types of topical progression in the 6 compositions

Topical Progression	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
Paralleled Progression						
Sequential Progression						
Extended progression						
T-Units						

Section 3. Toulmin's Model.

Toulmin's Model is composed of three parts: claim, data and warrant. The
definitions and examples can be found from the following table:

Toulmin's Model

Toulmin's Model	Definition	Example

	Claim	A conclusion whose merit must be established	if a person tries to convince a listener that he is a British citizen, the claim would be "I am a British citizen." (1)
	Data (Evidence)	A fact one appeals to as a foundation for the claim	the person introduced in (1) can support his claim with the supporting data "I was born in Bermuda." (2)
	Warrant	A statement authorizing movement from the data to the claim	In order to move from the data established in (2), "I was born in Bermuda," to the claim in (1), "I am a British citizen," the person must supply a warrant to bridge the gap between 1 and 2 with the statement "A man born in Bermuda will legally be a British citizen." (3)

Please assess the compositions according to the following rubric. Compositions will be scored on 5 levels: 1, 1.5,   2,   2.5, 3.   Your score can be 1.4 or 2.6. Please refer to the following criteria:

Index	Criteria	Scoring Scale
Claim	No specific problem stated and/or no consistent point of view. May have one sub-claim. No solution offered, or if offered nonfeasible, unoriginal, and inconsistent with claim.	0~1
	Specific, explicitly stated problem. Somewhat consistent point of view. Relevant to the task. Has two or more sub-claims that have been developed. Solution offered with some feasibility with major claim.	1~2
	Specific, explicitly stated problem with consistent point of view. Several well-developed sub-claim, explicitly tied to the major claim. Highly relevant to the task. Solution offered that is feasible, original and consistent with major claim.	2~3
Data	Minimal use of data. Data of the "everyone knows" type, with little reliance on personal experience or authority. Not directly related to major claim.	0~1
	Some use of data with reliance on personal experience or	1~2

	authority. Some variety in use of data. Data generally related to major claim.	
	Extensive use of specific, well-developed data of a variety of types. Data explicitly connected to major claim.	2~3
Warrant	Minimal use of warrants. Warrants only minimally reliable and relevant to the case. Warrants may include logical fallacies.	0~1
	Some use of warrants. Though warrants allow the writer to make the bridge between data and claim, some distortion and informal fallacies are evident.	1~2
	Extensive use of warrants. Reliable and trustworthy allowing rater to accept the bridge from data to claim. Slightly relevant. Evidence of some backing.	2~3

Criteria for Judging the Quality of *Claim*, *Data*, and *Warrant*.

Here is an example:

Honesty is the Best Policy

Honesty is the best policy is something we are taught from the time we are little children all the way through adulthood.(***Claim***) Our parents have told us, our teachers have told us and so has our pastor at church. But is it really? Is there ever a time when honesty is not the best policy? Is it best to be honest although it may upset another person or hurt their feelings?

The guideline of "honesty is always the best policy" is prominent in the Bible and the Christian faith because of the Ten Commandments. "Thou shall not lie" is essentially a "rule" handed down by a "higher authority."(***Data from authority***) As Christians, we are supposed to accept this rule and follow it without question. (***Warrant***)

There is also a situation which we should consider. What if there was a situation where you had to be dishonest to save yourself or someone else when that person is innocent. Speaking a lie may not come under 'Dishonesty' as we are not doing anything wrong.(E***motional appeal***) Thus, it depends entirely on the situation, and intelligent people realize and know how to deal with a difficult situation by not compromising on their principles and ideals. (Proposition)

At times absolute honesty may be difficult. It may even hamper progress and development.(***Inferential ground***) Can a doctor casually tell her terminally ill patient that there is no chance of survival? (***Emotional appeal***) Is there a time when honesty needs to heed to discretion? Honesty needs to be kept in mind because there is cause and effect relationship in this world. (***Warrant***) One lie can turn into several lies quickly!! Honesty to oneself is indeed the best policy! (***Claim***)

Claim: 2.6
Data: 3
Warrant: 2.3

Just as had occurred with the previous two sections, raters were then asked to fill in their

results, using the following chart, with respect to their six compositions.

Toulmin's Model	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
Claim						
Data						
Warrant						

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PUBLICATIONS

Gao, L. (2010). Investigating ESL Graduate Students' Intercultural Experiences of Academic English Writing: A First Person Narration of a Streamlined Qualitative Study Process. Accepted by *The Qualitative Report*.

Gao, L. (2009). Can executive skills help underachieving bilingual students? Pedagogical implications. In M. S.Plakhotnik, S. M. Nielsen, & D. M. Pane (Eds.), *Proceedings of the Eighth Annual College of Education & GSN Research Conference* (pp. 33-38). Miami: Florida International University. http://coeweb.fiu.edu/research_conference/

Gao, L., (2005). Thoreau's Individualism: From the Religious and Political Perspectives, *Proceedings of the CUPL Foreign Language Conference,* Beijing

Gao, L., (2003). A Comparison Between Robert Frost's Symbols and the Symbols in Chinese Ancient Poems (In Chinese). *Foreign Language Teaching and Research in Higher Education.* Jilin Education Press

Gao, L., (2003). How to Use Courseware to Teach Coherence (In Chinese). *Shandong Foreign Language Teaching, 06, 2003, pp 106-108.*

Gao, L. (2003). Applying Cooperative Learning in College English Teaching (In Chinese), Proceedings of Beijing college English association annual conference, Beijing, China.

Gao. L., (2002) Using Courseware to Teach Reading and Writing (In Chinese). Proceedings of the 2nd National College English Teaching and Research Conference. Nanjing, China.

Conference Presentations

Gao, L. (2011). Content-based Instruction: Models, Approaches and Teaching Methods. Presented at the second annual conference of educational Linguistics. Dalian, China.

Gao, L. (2010). Investigating the Experiences of Three Chinese Graduate Students' Academic English Writing: A Pilot Study. Presented at the Sixth Conference on Intercultural Rhetoric and Discourse. Atlanta, Georgia.

Gao, L. (2010). Contrastive Rhetoric in Chinese and English context: From schemata, and cultural schemata to rhetorical features. Presented at *the Ninth Annual College of Education & GSN Research Conference*. Miami: Florida International University.

Book Units and Chapters

Unit One: *Legal System* and Unit Two: *Constitutional Law*. In Qi J, (Ed.). *Legal English Course,* Higher Education Press, Beijing. (2005)

Chapter 4 Translation. In Li, L(Ed). *Modern Practical English Course,* Modern Times Press, Beijing. (2004)

Chapter 4 English Writing. In Li, L (Ed). Series of Guidebook for English Postgraduate Entrance Exam. China Caijing Press, Beijing. (2002)

Co-editing with Yi, T (2000). *Guidebook for Comprehensive English.* Liaoning University Press, Shenyang.