An Analysis of Rhetorical Features and Logical Anomalies in the EFL Argumentative Essays Written by Japanese University Students

An Analysis of Rhetorical Features and Logical Anomalies in the EFL
Argumentative Essays Written by Japanese University Students

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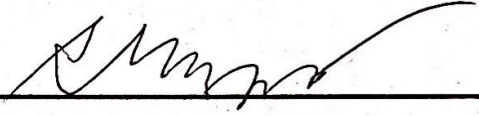Doctoral Committee:
Professor Osamu TAKEUCHI, Ph.D

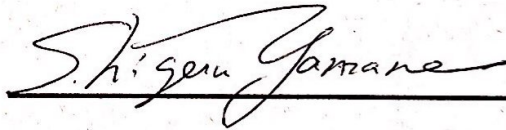Professor Atsushi MIZUMOTO, Ph.D.

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論文要旨

　現在、日本の英語教育は、大きな転換期を迎えようとしている。2020年から大学入試で４技能を測定する方向性が打ち出され、これに呼応するかのように 2022 年 3 月から実施に移される高等学校新指導要領では、外国語科に「論理・表現Ⅰ・Ⅱ・Ⅲ」が設置されるなど、日本人英語学習者の論理的思考の欠如への懸念から、特に「論理的に書く」指導への要求が高まっている。大学においても、文部科学省が打ち出しているグローバル化、研究力強化のもとで、他国と比較して研究論文の発表数が激減している状況（Wagner & Jonkers, 2017）を打破するべく、「英語で論理的に書く」力の養成は必須となっている。

　しかし、高等学校までの英語の授業では必ずしもライティングが重要視されてきたとは言えず、保田・大井・板津（2014）の調査では、高等学校ではパラグラフを用いたライティングを経験した学生もいるが、未だに短文の和訳を中心とした活動が多いと報告されている。また、多くの大学ではプロセスを重視したエッセイライティングの授業が主流となっている現状において、大学生の「英語で書く力」、特に「論理性」の欠如が強く指摘されている（Tsuji, 2016a；Yasuda, 2006）。そのため、論理面への指導が急がれるが、大学のライティング指導の中心となっているのは、正確に書く、つまり正しい文法や語彙の指摘が中心で、教師のフィードバックは論理的側面にまで及んでいないのが実情である（保田 他, 2014）。

　以上のような社会的背景のもと、本博士学位請求論文では、日本人大学生の書く英文の実態、特に修辞的・論理的特徴を明らかにすることを目的とした。これまであまり着目されてこなかった大学生の英文の論理的特徴や論理逸脱の傾向を知り、その原因を探ることで、今後どのような指導を行えば良いのかという示唆を得たいと考えた

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ためである。

　本論文は、3つの研究を含む、10章から構成されている。第1章では、本研究の端緒となった筆者の経験と日本の英語教育の実情から、高校生や大学生に英文を書く力が欠如していること、及びその教育の必要性を述べる。

　第2章では、本論文の研究課題を設定するために、これまでの外国語（L2）ライティング研究を、国内外の先行文献から概観する。本来、L2ライティング研究は、1960年代にアメリカの大学において英語を母語としない学生が増えたことを背景として、彼らへの指導の必要性から始まった。まず、L2ライティングに影響を与える要因を探る研究があり、(1) L2習熟度、(2) L1・L2ライティング能力、(3) L1・L2における作文経験、(4)メタ知識（ストラテジーなど）、(5) L1・L2における作文教育の経験が重要な要因であることが明らかとなった。これらを基にして、母語（L1）ライティング能力があっても一定以上のL2習熟度がなければ良い英文が書けないこと、またL1およびL2のライティングの知識があってもそれをテキストに反映させるには、L2習熟度及び書く訓練が必要であることなどが判った（Rinnert & Kobayashi, 2007; Sasaki & Hirose、1996 他）。この他にも、L2ライティングへの自信や嫌悪感なども英文への影響要因として指摘されている。

　次に、English as a foreign language（以後 EFL）/English as a second language（以後 ESL）学習者のL2ライティングに使用される語彙や文法をコーパス言語学研究の立場から明らかにしようとした一連の研究（Gilquin & Paquot, 2008; Granger & Rayson, 1998; Hinkel, 2003; Narita & Sugiura, 2006; Ringbom、 1998 他）、また誤用研究（Ikegami et al., 2007; Tono, 2000; 杉浦、2000 他）を概観し、(1)学習者のテキストは英語母語話者のそれと比較して非常に限られた語彙や文法項目を高頻度で使用していること、(2)話し言葉を多用するなど、レジスターを混同していること、(3)　I think など書き手中心の視点で書かれていること、などの傾向が

あることを指摘した。

　論理的側面に着目した研究に目を転じると、Kaplan（1966）が、異なる文化的背景を持つ書き手の L1 テキストの論理的特徴を示し、対照修辞学研究が広まったことを受けて、L1 テキストの特徴を明らかにする研究と、L1 と L2 テキストの比較から L2 テキストの特徴を明らかにしようとした研究が存在している。後者は、L1 の思考様式が L2 テキストを書く際に影響を与えているのかを分析したもので、日本人を対象とした研究には、Kamimura(1996)、Kubota(1998)、Oi(1984)などがある。これらの研究では、日本人学生が書いた英文の多くが帰納的論理展開であるが、その原因が L1 の転移であるかを調査した。しかし、決定的な結果は得られていない。現在では、L2 学習者が書いた文章にあいまいさや分かりにくさがあるのだとすれば、それは L1 の転移とは限定できず、L2 習熟度や過去に受けた作文教育や経験など様々な要因に起因するものとされている（Connor, 1996；Kubota, 2004；Matsuda, 1997）。

　加えて、日本人の英文の論理的弱点を L2 ライティング教育の観点から分析した研究についても言及し、(a) 日本人の学生の書いた英文にパラグラフの概念が欠如している（Nishigaki & Leisheman, 2001）、(b) 根拠が弱い（Oi, 2005a；Yasuda, 2006）、(c) 論理展開が直線的でなく読み手に推論させる、(d) 冗長的である（Tomioka, 2003）などの特徴があることを示した。最後に、L2 ライティングに影響を与える一要因として挙げられている日本における L1 および L2 の作文教育についても詳述した。L1 では小学校から起承転結や感想文など書き手の感情を綴る作文教育が中心で、大学入試直前に小論文を学んだ学生以外は日本語で論理的に書く教育を受ける機会が少ないこと、L2 ではパラグラフを基本としたアカデミック・ライティングの教育が中学校・高等学校で欠けていることが示され、そのために大学生の英文に過去に受けた L1 の影響が出る（Oi, 2010；Rinnert & Kobayashi, 2007）との考え方があることを指摘した。

第 2 章で紹介した日本人大学生の書いた英文の特徴を分析した先行研究のなかでも、語彙・文法を分析した研究は多い（Abe, 2007a; Narita & Sugiura, 2006; 投野、2007　他）。しかし、論理に焦点を置き、論理構造パターンを類型化し、論理逸脱の特徴、ならびに理由を日英対照で分析し議論したものは少ない。そこで本論文では、日本人大学生の英文に見られる論理的特徴、論理破綻の原因を、L2 writing に影響を及ぼす要因として先行研究で明らかにされている(1) L2 習熟度、(2) L2 作文経験、(3) L2 作文教育との関係から探ることとした。また、本研究では、論理破綻の原因の究明において、英文に見られる逸脱が日本語の発想によるものであるのかにも着目し、同じ学生が書いた英文と和文を比較する。

　以上の流れから、第 3 章では、本論文の研究課題を次のように設定した。

　　（1）日本人大学生の書く英文の論理的特徴ならびに特徴的なパターンを明らかにし、L2（英語）習熟度、L2 作文経験、L2 作文教育との関係を探る。

　　（2）日本人大学生の書く英文の論理破綻の特徴を明らかにし、その原因を和文との比較により探る。

　以上の課題を達成するために、本論文では 3 つの研究を行った。まず第 4 章では、研究で利用したデータの源となる「関西大学バイリンガルエッセイコーパス」（以後、KUBEC）について詳述した。KUBEC は、日本人大学生の英文ライティング能力を総合的に把握することを目的に 2012 年度から 3 年間にわたり関西大学の研究者により構築された大規模学習者コーパス（収容語数 300 万語）である。対象となったのは同大学の学部専門科目「英語ライティング 2」を受講した外国語学部（G グループ）と、「英語ライティング 3」を受講した法学部（L グループ）の学生である。G グループは、大学 2 年次に、約 1 年間にわたり海外の提携大学で勉強する Study Abroad Program（以

後、SA program）に参加しているが、L グループに海外留学経験はない。前者は日本人大学生のうちの上級者層を、また後者は平均的な層を代表するものと位置付けられた。両群の英語力の差は TOEFL 相当テストで有意にあることが確認されている。

　続く第 5 章では、筆者が本論文の研究のために援用した分析的枠組みを詳述した。分析的枠組みは、(A) エッセイの機能的構造分析 (Structural-Functional Analysis)、(B) 各文間の論理関係および修辞構造分析 (Rhetorical Structural Analysis)、(C) キーワード分析 (Keywords-Chain Analysis)、(D) メタディスコース分析 (Metadiscourse Markers ［MDM］ Mapping)の４つであった。(A) は、パラグラフ内に必要とされるトピックセンテンスやサポーティングセンテンスなどの機能的構成要素の有無および配列、(B) は、Mann and Thompson (1988) の談話分析理論 (RST: Rhetorical Structural Analysis) を援用した文間の論理的・修辞的関係、(C) は、談話の核となる語彙の連鎖および結束構造、(D) は Hyland (2005) が提唱する Metadiscourse Markers のうち、特に論理接続詞・接続副詞などのつなぎ言葉の使用傾向と頻度を調査した。これらの分析規準は、文章の論理を「一貫性・結束性」から見た様々な先行研究 (Halliday & Hasan, 1976; Kinch & van Dijk, 1978; Oshima & Hougue, 2006) をもとに選定した。

　第 6 章では、分析対象とした学生の様々な属性、データの分析方法、並びに KUBEC データの一部（２名）を使用し、４つの枠組みの有用性を検証した予備的研究について述べた。有用性の検証後、本研究では、KUBEC (ver.2013)のデータから G グループを更に TOEFL の点数で、上位を G1 (10 名)、中位を G2 (10 名)に分け、相対的にみて下位に位置する L グループ （9 名)と合わせて総計 29 人分計 58 例の論証文を分析対象とした。

　第 7 章では、Study 1 として、分析的枠組みの(A) エッセイの機能的構造分析と (B) 各文間の論理関係および修辞構造分析を行った。その結果、G1 と G2 はほぼ同じ論理

の構造を持っており、エッセイの導入部の後半で書き手の主張と議論の方向付けを行い、展開部の各パラグラフで、導入部で定めた議論が展開され、結論部で再度、主題文を出してまとめる形式となっていることが判った。いわゆる典型的な5パラグラフエッセイ（Oshima & Hougue, 2006；Someya, 1994）の論理構造である。特に展開部ではエッセイのトピックに特徴的な論理関係、つまり Hoey（1983)や Winter（1982)が追求していたプロトタイプ的な「論理の型」が見られた。その一方で、L グループでは、導入部の最初に主題文が置かれ、議論の方向付けがないために、導入部や展開部で論理が破綻する傾向が顕著であった。思いついたままの展開であり、定められた時間内に終えられていないエッセイもあった。

　第8章では、Study 2 として、分析的枠組みの(C) キーワード分析と(D) メタディスコース分析を行った。第7章で見られたようにG1 と G2 でほぼ同様の結果が得られた。つまり、議論の中心となるキーワードが所定の場所に置かれ、エッセイ全体を通して繰り返されていた。具体的には、議論の方向付けとなるキーワードが主題文に含まれ、各キーワードは順番に、展開部の各パラグラフのトピックセンテンスに置かれ、結論部の最初の一文に議論を再話する形で置かれていた。また、特徴的な談話マーカーの使用、特に列挙（firstly, secondly, finally)、逆接や対比（however)、理由（because）を表す接続副詞が論理展開を助けていた。L グループでは、キーワードが方向付けとして導入部に置かれておらず、展開部でも散発的であるため非論理的な展開になっているエッセイが多くみられ、また G グループと比較して MDM の使用は and, but, so, for example などに限られていた。

　Study 1 と Study 2 の結果は、G グループと L グループの「L2 習熟度」による違いと、授業を受講するまでに受けた「L2 の作文教育」および「L2 作文経験」の差によるものと推察された。前者は、一年時に学んだアカデミックライティングの知識と、二年時に SA program のもとで書いた作文の量が今回の結果に大きく作用しているも

のと思われる。一方で後者は、授業で論理構造などを学んでおり、その知識はあって
も英語力の低さや作文経験の欠如から、適切な論理構造を持ったエッセイの産出が難
しいものと考えられた。

　第９章の Study 3 では、分析的枠組みの（B）各文間の論理関係および修辞構造分
析において非論理タグ（NLOG）が付された箇所がどういった逸脱であるのかを、同じ
学生が書いた英文と和文を比較して調査した。分析の結果、英文では論理逸脱と見ら
れた箇所が和文ではそうではなく、和文の論理展開（およびその表層構造）をそのま
ま英文に転用した場合に英文の破綻が見られることが判った。論理逸脱の特徴として
Wikborg(1990) などが挙げた８つの例が特定されたが、本章ではそのうち最も頻度の
多かった「（直前の情報と直接）関連性の無い情報の存在」（irrelevant ideas）と「唐
突な論理の飛躍」（sudden topic shift）の２つを詳述した。これらは主にＬグルー
プに多く見られたが、習熟度に関わらずＧグループでも散見された。それら逸脱の原
因として明らかになったのは、(1) 展開部のパラグラフが帰納的論理展開であり、英
文では最初に来るべきトピックセンテンスが無いか、もしくは機能していない、(2)
和文の特徴である「冗長性」が転用され同じ議論が繰り返されている、(3) 日本語の
「読み手に推測させる」発想が英文で上手く機能していない、などである。英文の論
理展開は直線的でなければならないが、複数の話題が一つのパラグラフ内に存在し、
思いつくままに書く、L1 作文（いわゆる感想文形式）の影響が強く出ている（Oi, 1984;
Tomioka, 2003）ことも判った。

　Study 3 の結果から、Study 1 および Study 2 の考察と同様に、論理逸脱において
も、「L2 習熟度」、「L2 作文経験」並びに授業を受講するまでに受けた「L2 作文教育」
の差が大きく影響していると考えられた。Ｌグループの学生はパラグラフ構造を理解
していない上に、正しい単語や文法を選択する時点での認知的な負荷が高く、論理の
流れまでを意識して書けないと推察された。一方でＧグループの学生はエッセイ全体

の流れを意識し、書きながら修正することができるなど、十分な英語力、作文経験、そして教育も受けていた。論理破綻に関しては、主にLグループにおいて日本語の発想で英文を書いた場合に顕著であり、学生はこれまでの「L2作文教育」の欠如からL1作文の知識に頼らざるを得なかったのではないかと推察された。

　第10章では、以上の3つの研究の結果をまとめ、それらの限界点と教育的示唆、並びに将来の研究の可能性について言及した。本研究の限界として、データの数が少なかったため分析の結果を一般化できないこと、Gグループを更に2つのグループに分けたが、標準偏差で緩衝帯を設けるという考えがなく、それぞれの習熟度の違いを結果に十分に反映できなかった可能性があること、またエッセイというプロダクトのみを分析対象として、作文のプロセスを分析できなかったため原因の特定に限界があったことなどを挙げた。具体的な教育的示唆として、特にLグループに英語のパラグラフの概念が欠落していたことが明らかであったため、L2の習熟度が低くL2作文の経験が少ない学生に対しては、(1) パラグラフの構造と構成要素 (TS/SS) を教える、(2)上記（1）の知識を伝授するだけでなく、パラグラフからエッセイに至るまで段階的に書く機会を与える、(3) 書き始める前のプランニングを重要視し、日本語で論理的な流れを意識しながら内容をアウトライン化させる、(4) 個々人が書いていく過程で適宜、文法や語彙だけでなく、論の流れなどに対して feedback を与える、などを提案した。加えて、日本語の作文において特徴的な帰納的な論理展開や、個人の感情を吐露するような書き方は、英文では論理の逸脱とみなされるため、L1・L2それぞれの作文の書き方を比較しながら指導することも大切であると指摘した。最後に、今後は参加者への半構造的インタビューとプロセス分析を併せて行い、本研究の結果を更に考察することや、中高生、ならびに大学生に英文を論理的に書く指導を一貫して経年的に行い、彼らの英文がどのように変化していくかを見るような研究を行うことを将来の研究の方向性として述べ、本博士論文を結んだ。

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1. Introduction

1.1 Background

The immediate reason for embarking on the current research dates to a time when the author was teaching TOEFL writing at a language institute in Kyoto, Japan. Her students needed to obtain a higher score in the TOEFL writing section in order to continue their studies at a graduate school either within or outside of Japan. However, many of them were struggling with English essay writing: Their essays were full of grammatical errors and their range of vocabulary was very limited. Furthermore, the patterns of rhetorical flow of their essays differed considerably from those considered "the standard" in English-speaking countries. For instance, the main idea was often not placed at the beginning of a paragraph/the essay, and the writer's opinions were not clearly stated. Thus, the author taught her students the basic structure of English essays, consisting of such structural components as a thesis statement, topic sentences, supporting sentences, and so forth, as well as the use of discourse markers to connect sentences and paragraphs. Most importantly, she instructed them in the "logical" argumentation. As a result, their essays began to improve considerably. However, it became clear that they had not previously received adequate instruction in English essay writing.

According to an extensive survey conducted nationwide in 2014 by the Ministry of Education, Culture, Sports, Science and Technology (hereafter MEXT), Japanese students spend very little time on English writing in the classroom compared to the time spent on reading or listening. As a result, many of them feel that they have difficulty with writing in English (Takahama, Ito, & Katayama, 2015). In fact, writing ability as well as speaking ability is much lower than reading and listening abilities according to the results from the nationwide English tests administered on the 3rd grade high school students (MEXT, 2018a).

Another extensive survey was conducted by Yasuda, Oi, and Itatsu (2014) for both Japanese senior high school and university students (*N*= 481), regarding what and how English writing has been taught. The findings indicated that, in both institutions, the main focus of writing instruction still lies in grammatical correctness. In high school, sentence-level translation remained the mainstream, while the number of students who wrote more than two paragraphs was still limited. Given that National Center Test for University Admissions, the unified entrance examinations for university do not include a writing section, therefore high schools may have placed less emphasis on writing. In universities, on the other hand, although paragraph writing, in a cyclical process of pre-writing, writing, feedback, and editing, is integrated in most writing classes, students have barely attained the level of ability required to produce writing in several paragraphs. Since university instructors are given greater freedom to determine their own syllabi than high school teachers, the degree to which emphasis is placed on improving students' writing skills depends on individual instructors and universities. Writing is often taught using an integrated four-skills method, while the goals of writing instruction continue to emphasize grammatical correctness rather than content. Yasuda et al. (2014)'s survey shows that explicit instruction on logical English texts has been scarce in tertiary education. Oi (2010) showed that even though the importance of teaching rhetorical styles of academic English texts has been acknowledged by many teachers, it is still doubtful that they teach those styles appropriately in the classroom. As noted by Yasuda et al. (2014), "teachers' approaches were hardly geared toward helping students to become actual writers who make meaning in a certain rhetorical context" (p. 51). Due to lack of focus on logicality of the text, Tsuji (2016a) and Yasuda (2006) reported Japanese college students' inability of producing coherent texts is due to missing information or illogical sentences.

These situations, however, will be greatly changed under the new school curriculum guideline (the Course of Study) and the new unified entrance examination for full-scale implementation from the fiscal year of 2020. MEXT has stressed that English education should place more emphasis on "fostering [the] logical ability to think and express one's own opinions," under which the English subjects called *"Ronri-hyo-gen* [Expressing logically] Ⅰ, Ⅱ, Ⅲ" will be introduced to high schools from the fiscal year of 2022 in order to promote expressing ideas logically in the new High School Course of Study (MEXT, 2018b). So far, the amount of knowledge students possess has mainly been tested; however, the new examination will evaluate students' skills of utilizing the acquired knowledge to solve day-to-day challenges based on logical-thinking. Under this reform, students' ability of writing, along with those of speaking, listening, and reading will also be tested in the new entrance examination.

Universities are also facing new challenges in today's globalized world. In order to improve competitiveness in the academic and research environment, universities are required to improve students' English language skills necessary to achieve both academic study and research. It has been reported that Japan has been losing momentum in the field of research, because output of research papers and citation impacts have remained flat since 2000 (Wagner & Jonkers, 2017). Against this backdrop, MEXT (2018c) has launched "the program for promoting the enhancement of research universities" to increase the number of research papers since 2013. Since more than 95% of published papers in the field of science was written in English (Nederhof, 2006) and research papers need to be written logically (Kinoshita, 1981), nurturing L2 writing ability, in particular, writing logically will be even more necessary in universities. Under these circumstances, both in secondary and tertiary schools in Japan, teachers, instructors, and researchers have begun to emphasize the need

for instruction on how to write logical texts in L2 writing classes (Kawano & Nagakura, 2018; Otsuka, 2016).

Based on this educational reform and on the acknowledgement of the increasing need to teach writing skills to Japanese students, the author decided to deal with English writing as the main topic of her study, especially focusing on "writing logically" to meet the needs of present-day English education.

This dissertation consists of ten chapters. Chapter 1, the current chapter, presents the background and the outline of the dissertation. In Chapter 2, the major previous research dealing with English as a foreign language (hereafter L2) writing is reviewed to situate the current research in a larger perspective. The studies on main variables influencing the L2 writing are firstly reviewed, followed by the studies that have identified linguistic features of L2 learners' texts, and the features of rhetorical organization known as contrastive rhetoric. In this connection, since these studies were conducted mainly on major learner corpora such as ICLE, NICE, and ICNALE, these corpus projects are also described. In addition, since both L1/L2 writing instructional backgrounds are considered to be one of the major influential factors to the quality of L2 texts, L1, that is, Japanese, and L2 writing education in Japan are also looked into.

Chapter 3 presents objectives of the current research and research questions. The aim of this dissertation is to reveal the rhetorical organization characteristic to the English essays written by Japanese English as a foreign language (hereafter EFL) college students. Since the importance of nurturing students' skills of writing logically in English has been acknowledged by university instructors, investigation into English essays that university students often write in their English classes can be meaningful. She attempts to find noticeable patterns of organization that Japanese college students would use and the

rhetorical anomalies identified in their English essays. She hopes that the investigation into the reasons behind those rhetorical anomalies can present pedagogically useful information in teaching L2 writing both in the secondary and tertiary schools. Based on this aim, two research questions (hereafter RQs) have been formulated.

Since the investigation for this dissertation was conducted by using Kansai University Bilingual Essay Corpus (hereafter KUBEC), the brief description of the corpus project (e.g., the aim, the data collection scheme), and unique features are covered in Chapter 4.

In order to answer to the RQs, this author has developed four analytical frameworks, which are explained in Chapter 5. The frameworks include 1) Structural-Functional (SF) Analysis, 2) Rhetorical Structure Theory (RST) Analysis, 3) Metadiscourse Markers (MDM) Mapping, and 4) Keywords-Chain Analysis. The applicability of the four frameworks to the current research was confirmed in a pilot study to be reported in this chapter. In Chapter 6, methods and procedures for the main studies with larger samples are elaborated on. Since participants' L2 writing ability and educational backgrounds are found to be the two important variables from the previous studies in Chapter 2, the results of their essay evaluations, with which students' L2 writing ability is reflected, and the results of questionnaire survey related to their L1 and L2 writing background are demonstrated in 6.1 and 6.2, respectively.

In the three separate studies from Chapter 7 to Chapter 9,[1] the analysis to identify the rhetorical organization typical to the argumentative essays written by 29 Japanese college students at different English proficiency levels are elucidated. While rhetorical organization of each paragraph of introduction, body, and conclusion, is examined with the Structural-Functional (SF) Analysis and Rhetorical Structure Theory (RST) Analysis in

Chapter 7, organization from semantic cohesion is examined with Metadiscourse Markers (MDM) Mapping, and Keywords-Chain Analysis with two types of keywords, namely theme-setting keywords and argument-setting keywords in Chapter 8. The results of these two studies are then discussed in relation to learners' variables such as L2 proficiency, L2 writing ability, and L2 writing background. Chapter 9 presents Study 3, dealing with the logical anomalies typically observed in English essays by Japanese L2 learners, and the reasons for the anomalies will be investigated in comparison with their Japanese counterparts.

In Chapter 10 as the conclusion, the pedagogical implications of the entire research reported in this dissertation are described, together with the summary of the findings and the limitation of the current studies. Future research directions then conclude this whole dissertation.

Note

1. This current thesis has three separate analysis in order to answer to RQs. Therefore, the chapter titles are named as **Study** 1, **Study** 2 and **Study** 3 for convenience.

2. Literature Review

2.1 Studies on Main Variables in Students'L2 Writing

The L2 writing research dated back to 1960s when increasing number of international students entered universities in the U.S. The teachers of L2 composition noticed the differences in writing between L1 and L2 learners. Since then, in order to understand the distinct nature of L2 writers' texts, many researchers have investigated factors that influence L2 texts. Previous research (Hirose & Sasaki, 1994; Kamimura, 1996; Kaplan, 1966; Kraples, 1990; Raimes, 1985; Sasaki & Hirose, 1996) revealed that L2 text quality is influenced by many variables, including L2 proficiency, both L1 and L2 writing ability, higher order composing competence, meta-linguistic ability (i.e., awareness of the language system), and meta-knowledge of L2 writing (i.e., writing strategies, and knowledge of L2 writing).

The results of the investigation into L2 proficiency have been mixed. While some researchers argue that the determining factor of L2 writing quality is not the writers' linguistic proficiency, but rather their composing competence (e.g., Raimes, 1985; Zamel, 1982). Others maintain that L2 proficiency is the prime determining variable for the quality of L2 writing products (e.g., Carson & Kuehn, 1992; Cumming, 1989; Pennington & So, 1993; Sasaki & Hirose, 1996). In order to find out relations among the variables, Sasaki and Hirose (1996) investigated the factors influencing the quality of Japanese students' persuasive writing in their L2 (English) and created an explanatory model of EFL writing in Figure 2-1. They argued that composing competence is postulated as the most important high-order factor, which transcends L1 and L2 difference (Krapels, 1990), and three variables including L2 proficiency, L1 writing ability, and L2 meta-knowledge are mainly influencing L2 writing ability. Among these factors, L2 proficiency explained 32.6% of the total variance of students' L2 composition ability. They also argued that L1 writing ability manifests itself through the

use of writing strategies, and that two other variables, L1/L2 writing experience and confidence in L2 writing are also included in their model. Sasaki and Hirose (1996) highlighted with this model that although L2 proficiency is a prime explanatory variable, complicated interactions among these many variables are evident.
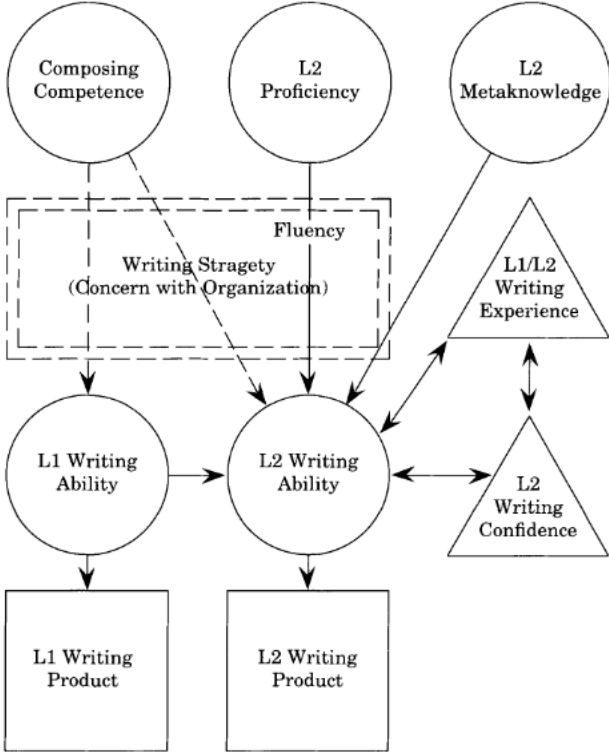
Figure 2-1. Explanatory model of EFL writing (Sasaki & Hirose, 1996, p. 161).

As to another important variable, composing competence, the underlying hypothesis is that L1 and L2 writing is similar in a broad sense (Silva, 1993), and that "composing competence" may be transferable from L1 to L2 (Krapels, 1990). Under this assumption, L1 writing ability in relation to L2 writing products was examined. However, the results were mixed again. Cumming's study (1989) yielded a positive correlation for L1 and L2 compositions compared between L1 French writers with writing expertise and those with no such expertise, while Carson and Kuehn (1992), Carson, Carrell, Silberstein, Kroll, and

Kuehn (1990), and Pennington and So (1993) did not find such a significant positive correlation in L1 and L2 texts written by other nationalities.

Kamimura (1996) and Kubota (1998) argued that composing competence is transferable from L1 to L2, but students require a certain level of L2 proficiency to make use of their L1 composition ability. Also, L2 writing was reported to require more cognitive overload than L1 writing (Schoonen, van Gelderen, & de Glopper, 2003; Tillema, 2012). These researchers argued that decisions about vocabulary and grammar that can be automated in students' L1 requires demands on working memory, increasing a cognitive overload in L2. Kamimura (1996) accordingly suggested that there might be a threshold in English proficiency level above which students are able to write similarly both in L1 and L2.

Regarding L2 metaknowledge, Reid (1984) emphasized that the knowledge of what is expected in L2 composition strongly influences the product and he then speculated that successful writers might know the features of L2 composition such as rhetorical convention, and stylistic differences from their L1 or readers expectations. Hinds (1983) and Kaplan (1966) argued that the knowledge of L2 writing could be influential especially when L1 has different rhetorical conventions from L2.

Studies related to L2 writers' strategies that influence the quality of L2 composition emerged around the 1970s. This was the time when the English as a second language (hereafter ESL) writing research started to focus on the process of writing rather than the written product. The studies which investigated writing strategies of the same writers both in L1 and L2, or studies which compared groups of learners at different L2 proficiency levels were conducted. For example, studies conducted by Bosher (1998) and Cumming (1989) indicated that L2 writing is a more cognitively difficult task than L1 writing and that L2 writing takes a longer time than L1 writing. Investigating Japanese EFL learners' writing

processes, Sasaki (2000, 2002) found that experts wrote faster and longer texts, and spent a longer time planning an overall organization than novices. This experts' global planning was "based on their elaborated but flexible goal setting," (Sasaki, 2000, p. 282), referring to what Bachman (1990, p. 98) called *strategic competence*. Skilled writers can assess the task, plan an appropriate action, and perform it in the most effective way. Thus, Sasaki (2000) insisted that taking time on planning is important. Numerous cognitive-oriented studies which examined L2 writers' thinking process or decision-making while composing have revealed salient differences between expert and novice writers. The former is more skillful in finding appropriate words and phrases (Chenoweth & Hayes, 2001; Cumming, 1989; Silva, 1993) and is able to pay attention to ideas and language forms simultaneously while making decisions (Cumming, 1989, 1990; Swain & Lapkin, 1995). At macro-level, as with their L1 writing, skilled L2 writers are able to do more effective planning, revising or editing their texts than unskilled writers, while unskilled writers are not able to plan, monitor, or revise their texts effectively. They take time on local planning (e.g., grammar, vocabulary, and content, etc.) and translate it into L2 (Raimes, 1985; Sasaki, 2000; Victori, 1999; Yamashita, 2013; Zimmerman, 2000). Sasaki (2002) also argued that it takes time for novice writers to acquire the writing strategies of experts (e.g., global planning), and added that a one-year writing course is not long enough for development of the writing strategies of experts. Sasaki (2002), citing Grabe and Kaplan (1996), argued that the novices would need "consistent practice in a variety of similar contexts to the point of proceduralization or automaticity" (p. 129) through many years of experience.

L1 use or translation while writing has also been one of the debatable topics in L2 writing research. L2 writers use their L1 while writing in L2 for a variety purposes, including *planning* (Kraples, 1990; Uzawa & Cumming, 1989; Woodall, 2002), *generating ideas or*

content (Krapels, 1990; de Larios, Murphy, & Manchon, 1999; Uzawa & Cumming, 1989), or s*olving linguistic problems* (Lay, 1982; Woodall, 2002). Sasaki (2002) found that novice writers translated more often from their L1 to L2 than expert writers did. Wolfersberger (2003) also found that low-proficiency writers used their L1 in prewriting and continued to translate their L1 to L2 to compensate for their lack of L2 ability. While the use of L1 has been criticized due to L1 interference (e.g., Rivers, 1981), the general finding has been that L1 use in L2 writing can be beneficial, but not in all situations and not for all the writers. There are indications that both L1 use during L2 writing and translation from L1 to L2 are beneficial for novice writers (Kobayashi & Rinnert, 1992; Lay, 1982; Uzawa, 1996; Uzawa & Cumming, 1989), especially in the prewriting and content development (Kobayashi & Rinnert, 1992). However, since *fluency* and *quality of texts* can be sacrificed, too much dependence on their L1 could interfere with their writing performance.

Studies about L1/L2 writing experience, instructional background, and L2 writing confidence that derive from extensive writing experience have also been conducted since they were regarded as important factors to L2 writing quality (See Figure 2-1 on page 12). Studies have reported that instruction emphasis on a particular aspect of writing could affect L2 writing products (e.g., Mohan & Lo, 1985). However, others have emphasized that teaching alone does not generate good L2 texts. The amount and frequency of writing that students were engaged in also influences the quality of L2 writing. For example, Japanese students who were regularly writing more than one paragraph in their secondary school were able to produce better L2 texts (Sasaki & Hirose, 1996). Rinnert and Kobayashi (2007) found that students who experienced writing both short and longer L2 texts were able to detect and correct errors and organization. Moreover, Hirose and Sasaki (2000) investigated the teachability of L2 metaknowledge in L2 writing experience and found that the teaching

effects of metaknowledge combined with journal writing was more effective than teaching alone. In fact, students' mechanics (e.g., punctuation, capitalization) in the control group improved over one semester.

Rinnert and Kobayashi (2007) compared novice writers who experienced intensive L1 composition training,[1] those who experienced training in both L1 and L2, and those who did not experience training in either L1 or L2. In the study, they found that although knowledge of L1 composition did affect positively, while students with writing experiences in both L1/L2 tended to produce greater audience awareness (i.e., in the use of transition markers), control over organization, and texts with more elaborated support. Students who had written in both L1/L2 languages were able to place more emphasis on logical connection and use a variety of metadiscourse markers. On the other hand, those who lacked intensive training in either their L1 or L2 wrote their English essays in a style of self-reflection, relying on past L1 writing practice (*saku-bun* or expressive writing). The authors (2007) reported that when text features are shared from L1 to L2 writing, training and practice in both of the languages improve the probability of the features being internalized by the students.

As to apprehension, many studies (e.g., Gardener, Smythe, & Brunet, 1977; Maclntyre & Gardner, 1989) have reported that language anxiety levels would be the highest at the early stages of language learning, but it decreases as learners' levels advance. This can also be applied to the L2 writing as well since L2 writing apprehension has been reported to decrease as both L1 and L2 writing experience increase. Apprehension is felt more by less skilled writers than skilled writers (Lee & Krashen, 1997, 2002). This evidence, however, contradicted in some other studies where a greater anxiety was observed in the students with higher L2 proficiency since "they feel uncertain of their ability to meet the demands of using L2" (Cheng, 2002, p. 653), and that L2 proficiency is not the only factor but other social,

contextual, and learner variables as motivation, personality, and self-confidence affects students' writing (Cheng, 2002).

The negative relationship between writing anxiety and confidence in writing have also been reported. Klassen (2002) reviewed 16 studies related to the relations between apprehension and self-efficacy in writing and found that greater anxiety reduced students' confidence in their ability to write. Pajares (2003) argued that self-efficacy has a significant impact on writing performance than writing anxiety. In this regard, Martinez, Knock, and Cass (2011) found that leisure writing had a positive relationship with writing self-efficacy. In his study, students who were engaged in free writing and leisure writing produced more creative texts without them having to worry about the rules of academic writing, thus freeing students from the pressure of writing. This result indicates that writing anxiety might be closely associated with genre and the condition of writing.

So far, studies conducted to find factors influencing L2 writers' text have been described. However, due to the difference in research design and intricate relations among the variables, the results have been mixed and some of them were contradictory.

2.2 Features of L2 Writers' Text

In this section, studies related to the identification of text features in syntax, morphology, and lexis are described. There have been a number of studies conducted under extensive learner corpus projects; thus, description of some of the major corpus projects are in order.

2.2.1 Learner Corpus Projects

Granger (2002) defines corpus linguistics as "a linguistic methodology which is based on the use of electronic collections of naturally occurring texts, namely corpora" (p. 4). Leech (1992) also mentions that "the study on corpus has been considered to be a powerful methodology, which has a potential to change perspectives on language" (p. 106). In particular, the compilation of L2 learner corpora, the collection of L2 learner language, began in the 1990s, in the aim of two potential research, Second Language Acquisition (SLA) research, which seeks to understand the mechanism of second language acquisition, and Foreign Language Teaching (FLT) research to improve both learning and teaching of the foreign or second languages. Since then, many studies with learner corpora have contributed to clarifying the features evident among learners.

The first seminal work was the International Corpus of Learner English（ICLE）project led by Dr. Sylviane Granger in 1990 at the Centre for English Corpus Linguistics (CECL) of the University of Louvain, Belgium, which investigated argumentative essays written in English by advanced-level college students of 14 different European nationalities. The ICLE v2 had 16 additions in 2009, including Chinese and Japanese data, while the v3 project is still ongoing. The total volume of data has reached 3.7 million words to date, and it thus represents the largest learner corpus in the world (Granger, Dagneaux, Meunier, & Paquot, 2009). The most recent corpus project initiated by CECL, Longitudinal Database of Learner English (LONGDALE), aims to build a large longitudinal database of learner English (Meunier, 2016). A group of 117 EFL students from the University of Louvain was followed over a period of at least three years beginning from 2008. Another major study, initiated by Hinkel (2002), collected 1500 argumentative essays from international college students

studying in the U.S., and categorized particular features of learners' texts, and reported both universal and L1-specific errors.

Initiated by these and other international projects, learner corpora projects in Japan soon followed with the aim of identifying the features of English texts written by Japanese EFL learners. The Japanese sub-corpus project under the umbrella project of ICLE v2 identified some of the lexical features as well as the most common errors in Japanese college students' argumentative essays (Ikegami et al., 2007; Kaneko, 2011).

The Nagoya Interlanguage Corpus of English (NICE), compiled by Masatoshi Sugiura, contains argumentative essays written by both undergraduate and graduate students at Nagoya University in Japan in 2008. It consists of two corpora: one consisting of 70,000 words of essays written by 207 Japanese university students and the other consisting of 118,000 words of essays written by 200 native speakers of English. Compared with ICLE v2, NICE is much smaller in size; however, it was collected under controlled conditions. Furthermore, one of the major features of this corpus is that it contains both the original English essays written by the students and their essays as revised by native speakers of English (hereafter NSE). The NICE corpus project has undergone several phases and the latest version is NICE3.3.

The Japanese EFL Learners Corpus (JEFLL) (Tono, 2007) is the most extensive project to have investigated essays written by Japanese junior and high school students. Tono and his group collected written data and identified various developmental characteristics of younger L2 learners. The written data comprise 670,000 words of essays written by 12,000 Japanese junior and high school students. The unique feature of this corpus is that the learners belong to the beginner proficiency level and were allowed to use Romanized Japanese when they could not come up with appropriate English words in writing their essays.

The International Corpus Network of Asian Learners of English (ICNALE) is the first major learner corpus of Asian EFL/ESL data (Ishikawa, 2013). It contains argumentative essays written by undergraduate students from 10 countries, including China, Hong Kong, Taiwan, Thailand, Pakistan, and Japan. This project was recently divided in two modules: the ICNALE-Written and ICNALE-Spoken modules. The former comprises a collection of 1.3 million words of essays written by 2,600 university students and 88,000 words of essays written by NSEs. Together with the spoken module, the entire corpus includes 1.8 million words of controlled L2 English speeches and essays produced by 3,550 college students (including graduate students) in 10 countries and areas in Asia as well as L1 productions by 350 NSEs.

In 2004, the NICT Japanese Learners of English (NICT JLE) Corpus (Izumi, Uchimoto, & Isahara, 2004) was released by the National Institute of Information and Communications Technology. This corpus comprises 1.2 million words of transcribed speech data, collected from 1281 Japanese learners of English at various proficiency levels. Although this is a corpus of spoken English, the error tagging scheme developed by NICT JLE has influenced other corpus projects on error analysis.

The analysis of learner corpora depends on two methodological approaches: Contrastive Interlanguage Analysis (CIA) and Computer-aided Error Analysis (CAE) (Gilquin, Papp, & Diez-Bedmar, 2008; Granger, 1998). CIA compares varieties of one and the same language: either native language and non-native language, namely interlanguage (NS vs NNS) or different non-native language (NNS vs NNS). The previous studies in this line of research have dominantly focused on the comparison of native to non-native languages to identify the features of non-nativeness or learner languages, or how they differ from the

target native language. This was determined by the overuse and underuse of specific linguistic items or structures.

According to Granger (2002), CAE involves one of the following two methods. The first is to select an error-prone linguistic items (i.e., word category, etc.) and scan the corpus to retrieve all the selected error items. The second method consists in devising error-tags and tagging the errors in the corpus, which is more labor-intensive but powerful than the first method because it retrieves all the errors. Error-tagged corpora have so far provided valuable information of learner languages (see **2.2.3**).

Now that major learner corpora and methodological approaches have been introduced, findings from some of the major studies conducted using each corpus will be briefly reviewed in the next section.

2.2.2 Linguistic Features of Learner Texts

Simple Linguistic Structure and Limited Lexis

The results of previous studies related to EFL learners' linguistic features include 1) learner lexis is limited, and basic vocabulary is overused (e.g., Carlson, 1988; Hinkel, 2003; Read, 2000; Ringbom, 1998); 2) learners confuse registers in written texts (e.g., Gilquin & Paquot, 2008; Granger & Rayson, 1998); and 3) learner texts are excessively personal (e.g. Johns, 1997; McCrostie, 2008; Petch-Tyson, 1998).

Ringbom (1998) investigated the overuse and underuse of the lexis used in the ICLE data and found that learners use a limited amount of basic vocabulary more frequently than NSEs. Vocabulary items overused by the learners include verbs (*are, do, make, get, think, find, want, know*), modal verbs (*can*), pronouns (*I, we, you*), negatives (*not*), conjunctions (*or, but, if*), and quantifiers (*all, some, very*), while underused vocabulary includes demonstratives

(*this, that*) and prepositions (*by, from*). Ringbom argued that L2 learners depend on words that are familiar to them, and they "clutch for words they feel safe with when using a second language" (a.k.a, the *teddy bear principle;* Hasselgren, 1994, p. 237). In addition, the particular features of L2 learners' vocabulary use are mostly attributed to "L1 transfer" whereby learners try to find English words equivalent to their L1. When they cannot find the specific word to refer to, they tend to underuse or avoid using a particular English word, or depend on vague words such as *people* or *thing*. This limited vocabulary of learners in comparison with NSEs is one principal reason for the general impression that "learner language is dull, repetitive, and unimaginative, with many undeveloped themes" (Ringbom, 1998, p. 50).

Hinkel (2003) also found similar shortcomings among L2 texts; thus, L2 writers are viewed as being unable to produce effective texts in comparison with native English speakers whose texts are fluent, syntactically and lexically accurate, and varied (Reid, 1993). Hinkel argued that these learners' unsophisticated text features were obvious, even among advanced learners who would have been exposed to substantial amounts of reading and had experience writing in academic contexts during their study at university.

Similar findings about limited lexis were revealed among Japanese EFL texts in ICNALE-W (Ishikawa, 2013). Sorted by log-likelihood statistical values, Ishikawa argued, *we, people, think, so, 't, (*e.g., *isn't, don't*, and *doesn't), but, example,* and *I* are overused by Japanese students, while *would, just, believe, while, been,* and *being* are underused when compared to NSEs.

Abe, Kobayashi, and Narita (2013) investigated the features of lexical items used by Asian learners in ICNALE using multivariate statistical methods. Features such as nominalization, the excessive use of first-person pronouns, private verbs, present tense,

conjunctions, and modal verbs are more frequently found in Japanese learners' texts regardless of any proficiency levels, and thus the researchers in this study concluded that these features are ascribed to L1 influence more than their proficiency levels. However, underuse of *would, believe,* and *while* is not only common among Japanese writers but common to other Asian nationalities as well.

Regarding adverbs, which is a popular target of corpus-analysis (Altenberg & Tapper, 1998; Granger & Tyson, 1996), Narita and Sugiura (2006) quantitatively examined 25 adverbial connectors in the essays written by Japanese students in ICLE and American students in LOCNESS. They found that Japanese students significantly overuse adverbial connectors, particularly in the sentence-initial position, suggesting that repetitive use of a limited variety of connectors is a common problem of Japanese EFL learners.

Yamashita (2014) also tried to identify lexical features from the investigation into Kansai University Bilingual Essay Corpus (KUBEC) version 2012 (see Chapter 4 for the details of KUBEC). Basic vocabulary most frequently used among the Japanese EFL college learners (e.g., *people, we, they, think, have, make, want, can, should*) have also been identified in previous studies (e.g., Granger & Rayson, 1998; Ishikawa, 2013; Ringbom, 1998). However, the overused words sorted by parts of speech (POS) categories revealed that some words were used uniquely by the students at a high-proficiency level included such set phrases as *in this essay, in addition, in conclusion,* linking adverbs as *however, moreover, therefore,* and enumerative adverbs as *firstly, secondly, finally.* These phrases and words helped create and maintain a logical flow of an argument in their essays. Avoidance of the first-person pronoun *I* was considered to be the indicator of which students were aware of formal academic writing convention, probably learned during study abroad program they attended.[2]

Stylistic Features of Learner Texts: Confusion of Registers and Personal Involvement

Another prevalent feature, which is spoken and conversational discourse in academic texts, has been identified (Granger & Rayson, 1998). They compared argumentative essays written by advanced French-speaking learners of English with those written by NSEs (British and American) and confirmed that French learners' essays displayed features typical of speech, while practically none of the features typical of academic writing were present. For example, French EFL learners overuse *I, you, but, very, only, so, now, often, sometimes,* and *here*, all of which are often used in conversation. Regarding nouns, vague words such as *people, thing, phenomenon, problem, difficulty,* and *reality* are overused while words related to argumentation, including *argument, issue, reasoning, claim, debate, support, proponent,* and *controversy* are underused. The *past* and *present participle forms* of the verb mostly used in academic writing are underused.

Gilquin and Paquot (2008) compared lexical items used in the argumentative essays written by learners of 16 different European nationalities with the written and spoken texts of NSEs, to ascertain which features of the registers were more identifiable in the L2 texts. They found that learners tend to overuse words and phrases that are more likely to appear in speech (e.g., *maybe, of course, really, like, I would like to talk about…,* and *I think that…*), and to underuse many of the formal expressions typical of academic writing. The authors attributed this to four possible reasons: (a) the influence of the spoken medium, with which students tend to be familiar, such as videos, and movies on the Internet; (b) the influence of the mother tongue (L1 transfer); (c) the influence of EFL teaching methods, which are more focused on oral skills; and (d) the effect of developmental factors. Marked overuse of the conjunction *because* and the adverb *so*, and heavy reliance on *I think* in the groups of French, Spanish, and

Swedish learners were also identified (Aijmer, 2002; Granger, 1998; Lorenz, 1999; Neff, Ballesteros, Dafouz, Martinez, & Rica, 2003).

Another key finding is the particular discourse features employed by learners of English. It has been pointed out that their texts are rhetorically unstructured and overly personal (Johns, 1997). Petch-Tyson (1998) has explored some features of involvement or writer-reader visibility in the texts, comparing four European nationalities (Dutch, Finnish, French, and Swedish) with Americans. It was revealed that European texts show a higher indicator of personal involvement, such as the use of *I*, across these corpora than American texts. The sentence initial (e.g., *I think that…*, *I am not sure that…*) and end-placement feature (e.g., *…I think, …I guess*) create more instances of conversational style (Petch-Tyson, 1998). McCrostie (2008) replicated Petch-Tyson's study for the argumentative academic essays written by Japanese university students and found that Japanese writing contains far more expressions of personal involvement, resembling spoken language as a result.

Hinkel (1997) compared essays written by Asian-background EFL writers and those written by NSEs, in order to examine the use of "indirect strategies" with metadiscourse markers. The results showed that Asian L2 writers, including Japanese, use indirect strategies such as vagueness, repetition, and hedges, more frequently in their discourse than NSEs. Hinkel thus argued that these features of indirectness violate the expectations of English-speaking academia in respect to writing, and concluded that ESL writers should, therefore, be taught to write explicitly, with an appropriate style or tone of writing that meets such expectations.

2.2.3 Features of Errors

In parallel with the compilation of learner corpora such as the ICLE (Granger, 1998), systematic analyses of learner errors from those corpora have started. It coincided with the time when the central focus of error analysis (hereafter EA) shifted from identifying the process of L2 acquisition to more focus on utilizing the results of analysis as useful pedagogical information.[3] The primary assumption of EA has been that, by analyzing errors, we can obtain information on the cognitive stages of language learning or *interlanguage* (Selinker, 1972) and on the common difficulties of L2 learning. By making errors, learners can learn what knowledge they have acquired through positive or negative feedback from interlocutors (Ellis, 1994).

The use of Computer-aided Error Analysis or CEA (Dagneaux, Denness, & Granger, 1998) has enabled us to cover a wider range of errors systematically and statistically. Degneaux et al. (1998) led the development of 50 error tags and the error editor software *Universite Catholique de Louvain Error Editor* (UCLEE), which enables researchers to insert tags and corrections in corpus data. This system was used to generate preliminary results of the error-tagged ICLE sub-corpus of French EFL learners whose difficulties were most frequently found in articles, verbs, and pronouns regardless of students' proficiency levels. Granger (2003) also developed the French Interlanguage Database (FRIDA) corpus, and the error-prone categories found in this corpus were given attention in CALL exercises.

After some of the major EA studies were conducted internationally, studies to identify errors made by Japanese learners of English were also conducted under major learner corpus projects. Ikegami et al. (2007) conducted the first major EA using a sub-corpus of ICLE v2 (70,507 tokens) and investigated the errors frequently found in the argumentative essays written by Japanese college students. The researchers categorized errors into *form, grammar,*

lexis, punctuation, register, style, word, and *lexico-grammar*, and found that the most frequent errors occurred in *grammar* (42.53%)*, lexis* (16.25%)*,* and *style* (10.39%)*.* In terms of *grammar* errors*, articles* (15.48%) are the most frequent type, followed by *verbs* (10.50%) and *nouns* (8.39%). This research has greatly contributed not only to the findings in relation to the English errors commonly made by Japanese students, but also to the compilation of a textbook that utilized the knowledge gained from the findings (Ikegami et al, 2007).

Corder (1967) asserts that errors can provide information about the current state of learners' language development. Thus, based on the results of EA conducted on the NICT JLE Corpus, Izumi, Uchimoto, and Isahara (2005a) attempted to identify the acquisition order of major English grammatical morphemes by Japanese students in comparison with the results of Dulay, Burt, and Krashen (1973) and Tono (2000). The former (i.e., Dulay, Burt, & Krashen, 1973) supports the hypothesis that major grammatical morphemes are acquired in the common order by learners, regardless of variation in their backgrounds, including their L1, ages, or learning environment. The latter (Tono, 2000) supports the contradictory hypothesis that differences in learners' backgrounds cause the differences in the order of acquisition. The results of the Izumi et al.'s study showed that Japanese learners have a unique acquisition order which supports the second hypothesis. The acquisition of *articles* (the distinction between *a, an*, and *the*, for example)*, plural-s,* and *third person singular-s* occur in the later stage. Tono argued that this might be attributed to L1 transfer, since Japanese learners do not have these grammatical categories.

The JEFLL Corpus led by Dr. Yukio Tono was another major project on EA of Japanese learners of English (Tono, 2007). Using error tags developed for the NICT JLE Corpus, the feature of parts-of-speech used in English essays (descriptive and argumentative essays) written by junior and high school students were examined. Following Izumi et al.

(2005a), he also attempted to find acquisition order of grammar items among Japanese students. For example, the number of determiners, prepositions, predicative use of adjectives, and inflectional forms of verbs gradually increase as the students' grades advance. These phenomena indicate that the syntactical structure becomes more complex as the grades advance. Regarding verb usage, including tense and aspect, it was found that many Japanese learners of junior to senior high schools were unable to use the past tense correctly, and errors in both the progressive and perfect forms were noticeable. The extensive research conducted on the JEFLL corpus ultimately led to the completion of the CEFR-J, which shows the developmental stages that Japanese learners of English go through with the "can-do" statement (Tono, 2017).

Abe (2007) investigated errors across students with different proficiency levels of English both in the NICT JLE corpus (speaking) and JEFLL corpus (written) with the aim of identifying the features of L2 use at different developmental stages. Verb errors are frequent among elementary-level students, while noun errors are found among students with intermediate to upper levels of English. It was also clear that verb aspect errors and noun inflection errors decrease over the developmental stages of spoken production, while tense and verbal lexical errors decrease over the developmental stages of written production. Abe mentioned that errors provide information on the problems learners face; thus, teachers need to understand them and should not treat them lightly.

NICE also embarked on EA starting with the development of an error annotation scheme (Koizumi, 2008; Sugiura, 2008). One of the features of this project is that extensive correction was conducted by NSEs and the revised texts were included in the NICE corpus. With the help of these revised texts, Koizumi (2008) compared the errors in NICE (written) and NICT JLE (spoken), and found that most errors occurred in verbs, nouns, articles, and

conjunctions, and that the *omission* of articles and *unnecessary* conjunctions were prevalent in both corpora.

Sakaue (2008) examined the NICE corpus to identify the errors made by Japanese students according to their English proficiency level. Similar to the previous findings (Koizumi, 2008), it was found that errors occurred most frequently in determiners, nouns, and verbs, in that order, regardless of students' English proficiency. Errors in the choice of vocabulary appropriate to the context were the most prevalent among the high and intermediate groups; however, basic errors, including those related to singular/plural forms of nouns and verb forms, were identified predominantly among entry-level students. The erroneous usage of coordinate conjunctions *and* and *but* placed in the sentence-initial position can be a particular focus (Sakaue, 2004).

When an annotation scheme was developed for this study, Izumi, Uchimoto, and Isahaya (2005b) tried to include discourse-level errors, for example, "unnatural expressions" or "sentences or phrases which do not make sense" as judged by NSEs, in order to assess the "communicative ability" of Japanese EFL students. This information can be useful in identifying the errors that are ascribed to L1 transfer or direct translation from Japanese; however, the research on this discourse error analysis has not yet been completed. Future research is needed.

Yamashita (2016) also sought to identify the features of syntactical, lexical, and discourse-level errors, using KUBEC version 2014 data. Overall results showed that *misformation*, which is the wrong form of a structure or morpheme (i.e., I *seen him yesterday)*, incorrect word choice,* and *missing* of the target word were the most frequent in every POS category, as was the case with Tono (2007), and that *noun, verb, preposition, article* were found to be the most frequent error categories which was already found in major

studies (Ikegami et al., 2007; Sakaue, 2008; Tono, 2007). Unlike Sakaue (2008), such morphological errors as omission of *plural-s* or *third-person singular-s* were found in learners' texts regardless of proficiency levels. However, there was a significant linkage between students' English proficiency levels and the numbers and types of errors. While there were few fatal errors in the four POS categories surveyed among high proficiency groups, there were many grammatical errors among the lower proficiency groups, which caused the sentence to be incomprehensible. Initiated by Izumi et al. (2007), Yamashita (2016) analyzed discourse-level errors in order to assess the "communicative ability" of Japanese EFL students. The results showed an abundance of interlingual transfer or direct translation of Japanese idiomatic phrases. She suggested *paraphrasing* as one potential solution to this problem.

After errors typical to the learners have been identified, *explaining the errors* and *correcting errors* are important (Ellis & Barkhuizen, 2005). However, there is difficulty in discerning the distinction between *intralingual errors,* also known as *developmental errors,* and *interlingual errors*, which are caused by interference of learners' L1 (Richards, 1974). While only a limited number of studies (e.g., Bryant, 1984; Shuhama, 2015) have been conducted to identify the reasons for these errors, Wu (2015) attempted to identify the factors that hinder L2 acquisition of 337 Japanese college students in both spoken and written data. She found both *interlingual errors*, which involve L1 to L2 translation, and *intralingual errors*, which involve overgeneralization and simplification. Wu drew attention to the need for "explicit focus on form" (Norris & Ortega, 2000) in order to reduce noticeable common errors among the students and proposed the explicit correction of frequent errors in class.

2.3 Studies on Text Organization: Coherence and Cohesion

Studies of text organization have been conducted under the two key notions of coherence and cohesion. Units of *discourse*, defined by Widdowson (2007), are "put together under the certain principle of connectedness" (Maghfiroh, 2013, p. 33), and Kane and Peters (1996) differentiated two notions of discourse unity: coherence as *unity of thought* and cohesion as *unity of form.* According to Kane and Peters, coherence is realized by text relevance, proper order, and inclusiveness, while cohesion is achieved through sentential ties and transitional links, such as repetition, connectives, pronouns, demonstratives, and syntactic patterns. Salkie (1995) also mentioned that coherence can be defined as consistence in form and meaning, while cohesion is made up of the devices that make discourse coherent. Mey (2001) agrees with the idea that coherence concerns the semantic connectivity in discourse, while cohesion is related to syntactic and structural connectedness. Under these concepts of coherence and cohesion, numerous studies have been conducted to clarify the nature of a coherent text.

One seminal work about cohesion is probably the typology of linguistic devices as defined by Halliday and Hasan (1976). They defined five cohesive relations identified in a text: reference, substitution, ellipsis, conjunction, and lexical cohesion. Lexical cohesion is divided into *reiteration*, such as repetition of the same words, synonyms and antonyms, *hyponymy* (general/specific relation of lexicon), and *collocation* (semantically-related lexical items). These cohesive devices create connectivity between the sentences.

Metadiscourse markers, as proposed by Hyland (2005), also correspond to the notion of cohesion. They represent "a writer's or speaker's attempts to guide a receiver's perception of a text" (Hyland, 2005, p. 3) and include a range of discourse devices. *Textual metadiscourse markers* deal with the logic of the discourse; in other words, text cohesion. Most textual

metadiscourse is achieved by conjunctions and adverbials, as well as their respective metaphorical or paraphrasing expressions (e.g., *as a result, on the other hand*). These connective devices are categorized as *interactive metadiscourse,* since Hyland (2005) construes metadiscourse as comprising writer-reader interactions.

As to coherence, a number of studies have focused on the semantic structure of a text at the two levels of macrostructure (global coherence) and microstructure (local coherence). The former level refers to a global level of organization or connectivity, while the latter considers the semantic relations between sentences or relations between propositions expressed by these sentences (van Dijk, 1980).

A number of studies seek to examine these two levels of text organization from the viewpoint of discourse analysis and to identify the patterns of text construction. Hoey (1983) and Winter (1982) found organizational patterns occur in coherent texts; for example, *Cause-Consequence, General-Particular, Instrument-Achievement,* and *Preview-Detail, Problem-Solution.* Crombie (1985) proposed *Situation-Problem* and *Topic-Restriction-Illustration.* Researchers have also examined the relations between sentences or clauses. Hobbs (1990) stated that text coherency can be examined by investigating clausal relations, and Dahlgren (1988) stipulated 20 clausal relations. Mann and Thompson (1988) proposed Rhetorical Structural Theory (hereafter RST), under which 25 rhetorical relations between constituent sentences, or between the *nuclei* and the *satellite* (see **5.3** for the details)*,* are stipulated. These rhetorical relations were further expanded by Carlson and Marcu (2001) to 75 relations. The main contribution of their study is in displaying the relations between clauses hierarchically. Halliday (1985) focused on the hierarchy of information in a text and noted that English clauses are structured in the manner of a communicative event. He defined two types of information in a text, the *theme* and the *rheme*,

and stipulated the *given-new structure*, whereby information that is already known or predictable is the *given*, while what is new and unpredictable is *new*. The sentences often start with a *theme* or the *given*, and continue with a *rheme,* or the *new*. The coherence of a text is then examined by how the two types of information are distributed.

Based on the concepts of coherence and cohesion, studies have been conducted investigating "logical anomalies," especially those that have dealt with English texts written by non-NSEs. Wikborg identified coherence breaks from an analysis of 114 essays and papers written by Swedish EFL students. "Coherence breaks" are the disrupted sequences of ideas within paragraphs, and those found by Wikborg (1985, 1990) were of two types: *topic-structuring problems* and *cohesion problems*. Regarding text organization, five types of coherence breaks were found in students' essays. They include (a) *unspecified topic*: topic sentence is too general or too specific; (b) *misleading paragraph division*: there is a paragraph division when it is not necessary, which misleads the reader to expect a new topic inserted; (c) *missing or misleading sentence connection:* there is a break between the sentences; (d) *unjust change of / drift in topic:* there is an irrelevant topic, or off-topic not relevant to the point of focus in a paragraph; (e) *uncertain inference ties:* reference errors. Using the taxonomies from Wikborg (1985, 1990), Oshima and Hougue (2006), and others, Maghfiroh (2013) found that unspecified topic, disunity of thought, disorganization of ideas and less information were the most frequent causes of coherence breaks among the English texts written by Indonesian EFL students.

Skoufaki (2009) detected coherence errors in 45 paragraphs written by Chinese EFL students, using Rhetorical Structure Theory (Mann & Thompson, 1988). Following Skoufaki (2009), Ahmadi and Parhizgar (2017) examined 64 Iranian EFL learners' essays in descriptive and argumentative genres and found eight different types of coherence error, more types than

Skoufaki's result. The most frequent types of breaks were *irrelevancy* and *change of a topic*. This may partly be ascribed to the tendency of learners to write their essays in an inductive order, and their inability to coherently connect each part of their texts.

2.4 Organizational Features of Japanese L1 and L2 texts

2.4.1 Studies on Contrastive Rhetoric

There have been a number of studies which seek to identify the organizational characteristics of either or both L1 and L2 texts, and the texts written by Japanese were also investigated under the contrastive rhetoric study. Kaplan argued in his seminal study in 1966 that a typical paragraph organization of Asian nationalities was characterized as "turning and turning in a widening gyre" (p. 10), and as being circular and getting to the point to the end. The texts of Asian nationalities were often organized inductively, unlike typical English texts, which were organized deductively. Hinds (1983) examined *tensei-jingo* (天声人語),[4] and pointed out the *ki-sho-ten-ketsu*（起承転結）pattern[5] that is unique to Japanese compositions, as well as such characteristics as *quasi-inductive* or delayed introduction of purpose and *reader responsibility.* Based on these seminal works and their assumption that each language and culture has unique rhetorical conventions and that they negatively affect L2 writing (Grabe & Kaplan, 1996; Kaplan, 1966), more studies have been conducted to probe into L1 (Japanese) transfer to L2 (English) in organization patterns (Hirose, 2005; Kubota, 1998). Studies including Kamimura (1996) and Oi (1984) compared English essays written by American and Japanese students. The findings characterized Japanese L2 writing as progressing from "specific to general" (inductive) in contrast to English L1, which is generally characterized as progressing from "general to specific" (deductive). However, "general to specific" organizational pattern was found among advanced Japanese EFL writers

in Kobayashi (1984) and Yasuda (2006). These studies suggest that Japanese students who had previous L2 writing experience and a certain level of L2 proficiency may have had a preference over the text organization preferred by L1 English students.

Among the studies comparing organizational patterns between L1 and L2 texts written by the same writers, the results of studies (Hirose, 2005; Kamimura, 1996; Kubota, 1998; Sasaki & Hirose, 1996) found positive correlations in the evaluation between L1/L2 essays, especially among the students with a high L2 proficiency. Kubota (1998) revealed that half of the Japanese EFL students wrote their L1 and L2 essays in different organizational patterns of either an inductive or a deductive style of argumentation, while, even among their L2 essays, those written in the inductive pattern were found to be evaluated positively by NSEs. Her study confirmed that organizational patterns are not always negatively transferred from L1 to L2. The results of these studies were not merely the matter of organizational patterns as noted in Hirose (2005), but they reflected multi-facet factors including writers' L2 proficiency, their perceptions about good organization, and the writing training participants received in the past. In fact, Sasaki and Hirose (1996) found in their retrospective questionnaire that good writers with a high L2 proficiency were careful of overall organization in pre-writing and while writing; thus, both of their L1 and L2 texts were evaluated highly regardless of either "general to specific" or "specific to general" organizational patterns.

Because of mixed findings in previous contrastive rhetoric studies, Kaplan's assertion has come to be criticized as a "reductionist, deterministic, prescriptive, and essentialist orientation" (Leki, 1997; Spack, 1997; Zamel, 1997). Researchers have argued that Kaplan's model is only formulated from the viewpoint of NSEs, and that there are more rhetorical patterns that do not fit into his model. It has been confirmed so far that although L1 influence or culture-dependent factors are not able to be eliminated entirely, such factors as writers' L2

proficiency, L2 writing experience, and educational background have a greater influence on their organizational patterns (Connor, 1996; Kubota, 2004; Matsuda, 1997). The nature of contrastive rhetoric itself has changed over the past 30 years, due to changing sociocultural dynamism, from Kaplan's alleged promotion of the superiority of Western writing (Kubota, 1999) to identification of the features of the written texts unique to the concerned culture (Atkinson, 2000; Enkvist, 1997).

2.4.2 Studies on Rhetorical Weakness of Japanese L2 Texts

There are also numerous studies related to rhetorical weakness found in English texts written by Japanese college students. Nishigaki and Leishman (1998) identified Japanese students' inability of composing a paragraph. Among the English essays written by their college students, they found that prevalence of English texts composed of one extended paragraph or only body paragraphs with no introduction or conclusion. Their following study (Nishigaki & Leishman, 2001) and Nishigaki, Chujo, McGoldrick and Hasegawa (2007) also found irregular paragraph structures where a large number of paragraphs consisting of only one, two, or three sentences. Taniguchi (1993) found 43% of the 213 compositions she analyzed did not take a paragraph form.

Regarding the features of rhetorical convention Japanese L2 texts possess, Oi and Kamimura (1996) reported differences in the style of argumentative essay writing between American and Japanese college students. They found that the latter group use more "reservation" or "sentences in which the writer shows his/her understanding to the counter opinion to his/her or his/her original opinion." This tendency gives the impression of circularity of argumentation as illustrated by Kaplan (1996). In this regard, their findings support Okabe's (1993) finding that western rhetoric places more emphasis on persuading the

audience with logic, while Japanese rhetoric places more weight on evoking empathy in the audience. Similar to Okabe, it has also been argued that Japanese tends to be reluctant to express one's opinions explicitly, tending to be indirect or ambiguous (e.g., Naotsuka, 1980; Tomioka, 2003). Oi (2005a) also compared argumentative essays written in English by Japanese and American students based on the Toulmin Model (1958),[6] and revealed some features of the argumentative styles of the Japanese students, which include *indecisiveness, inconsistency,* and *undeveloped argumentation*. Furthermore, Yasuda (2006) tried to probe into specific weaknesses in the argumentative essays written by Japanese university students of EFL. The results of the analysis showed that providing sufficient detail of evidence, specifically, supporting a claim with reasons and backing up the reasons with warrants, was quite difficult for the students. Tsuji (2016a) found the similar features as Yasuda (2006), arguing that main points of argument are not comprehensible because of missing information or incoherent sentences.

Because of the results of these studies revealing anomalies of Japanese L2 texts, Nishigaki et al. (2007) noted that organization is one weak element in Japanese students' L2 writing, citing that "discourse structure of Japanese students' L2 essays seemed, "disorganized and illogical, filled with nonrelevant material, developed incoherently with statements that remain unsupported" (Harder & Harder, 1982, p. 23). Naotsuka (1980) also claimed that these rhetorical features of Japanese L2 texts create misunderstanding to English-speaking nationalities who state their opinions directly.

After these studies were conducted, there have been pedagogical studies aimed to improve argumentation of the Japanese writers. Oi and Tabata (2012) considered Japanese L2 writing education lacked a concept of paragraph writing, and they introduced the English paragraph structure as a foundation of logical argumentation to 32 junior high school students.

They taught the structure of a paragraph, the use of transition words, how to generate ideas with an outline step by step in 12 class meetings. The posttest showed that students produces more words, sentences and transition words, and their ideas were written logically in a paragraph form. Oi (2010) conducted similar sessions and the result from one semester instruction showed that junior high school students learned how to write English essays logically with several paragraphs. She also found that this knowledge could be transferable in writing *shoronbun* (小論文)[7] in Japanese. She argued that in order to express one's idea persuasively, teaching English paragraph structure had some importance both on L1 and L2 compositions.

Another study conducted by Tsuji (2016b) confirmed the effectiveness of pre-writing activities using two types of worksheets for what-to-write and how-to-write peer activities in order to generate the logical thread of arguments discussed in class. She emphasized the importance of the role of pre-writing strategies with which her college students were able to logically organize their thoughts and arguments.

2.5 Instructional Background in Both L1 and L2 Writing

Lastly, L1 and L2 instructional background needs to be described. Instructional background is an important factor influencing students' writing products. Traditionally, most Japanese students have not been taught any formal style of Japanese composition at any levels of education. According to Watanabe and Shimada (2017), Japanese composition, *saku-bun* (作文) refers to "tsu-zu-ru (綴る)," which literally means that *writing in chronological order* or *writing as you feel*. One example is *kanso-bun* (感想文) which has often been provided as an assignment in elementary schools. Writing about ones' personal experience or feelings have constituted the basis of Japanese composition instruction (Hirose, 2005; Watanabe,

2017), and writing logically has not been the immediate aim of Japanese composition. However, an extensive survey conducted in 2013 on 598 university students (Watanabe & Shimada, 2017) showed that several pages of report assignments (レポート課題) were often assigned to as an alternative to examination in their universities, and they have to be written logically. One third of the students responded that they rarely wrote any types of Japanese compositions in secondary school. They were only provided with an "explanation" of how to write an opinion essay or a short thesis called *sho-ron-bun* (小論文), which had to be written logically in their secondary school. However, they were not given a chance to write either of them in class. Considering this situation, writing a report must be a big burden for the university students. Since most secondary schools do not have time to spend on composition instruction, preparatory schools provide lessons geared for *sho-ron-bun* for examination purposes (Watanabe & Shimada, 2017).

Another fact about L1 composition instruction is that most of the authorized Japanese textbooks in present day include *ki-sho-ten-ketsu* pattern, and *jyoron-honron-ketsuron* (introduction-boty-conclusion) pattern to teach for argumentative writing; however, they do not include how to write a paragraph (or *danraku*) logically. Watanabe (2017) emphasizes that how to write a paragraph (or *danraku*) should be the top priority, and that teaching "paragraph writing" similar to English composition is necessary even for L1 composition instruction, since an "English paragraph" itself requires logical construction of ideas with a thesis statement backed by supporting sentences. In fact, many universities have started to provide Japanese academic writing courses in which students are taught paragraph writing similar to English (Watanabe, 2017).

Regarding English writing, the time to spend on writing instruction has been quite limited. The questionnaire survey given by Oi, Itatsu, and Horne (2016) to 129 secondary

school English teachers in 2013-2014 reported that there was less emphasis on writing than other skills necessary for students to prepare for entrance examinations. In some of the English classes, students were provided sentence-level translation practice, focusing on correctness of vocabulary and expressions. Kawano and Nagakura (2017) also conducted a survey for 61 university first-year students, and found that half of the respondents lacked experience in paragraph writing during high school. Under this situation, it is understandable that many students could attend university with little experience of English composition. On the other hand, there has been an increase in the number of universities which provide English writing to improve all four skills of English. In the survey conducted by Yasuda et al. (2014), eighty percent of 481 university students reported that they wrote more than two paragraphs in English in their freshman year, most of which were given feedback by their teachers. Many teachers in universities felt, however, that students' writing ability was less than they expected, and feedback was given for grammatical correctness rather than content.

Hirose (2005) argued that past writing instruction in either L1 or L2 is likely to affect students' choice of L2 organizational patterns. Rinnert and Kobayashi (2007) found that students who did not receive L1/L2 composition training tended to apply a style of *saku-bun* or a *"write-as-you-feel"* style of Japanese composition when they write in English. Thus, in relation to the education students received, L1 transfer could be one factor influencing their L2 texts.

Notes

1. The researchers examined university students who received special preparatory training in writing L1 and/or L2 short essays for university entrance exams.

2. Hyland (2002) argued that avoidance of the first-person pronoun *I* in academic writing is not necessarily wrong, and "runs the risk of not establishing an effective authorial identity and failing to create a successful academic argument" (p. 354). He then suggests effective use of the first-person pronoun *I* in an academic text.

3. "Error Analysis (hereafter EA) is an area of Applied Linguistics and Second Language Acquisition (SLA) in particular that deals with the systematic and methodical collection of second language (L2) errors in learners' language production" (Hinkel, 2016, p. 1). The initial objective of EA in the 1960s was to engage in the contrastive analysis of learner language, with a primary focus on the phenomena of linguistic transfer from learners' L1. After the publication of Corder's seminal article titled "The Significance of Learner's Errors" (1967), the central focus of EA shifted from identifying the process of L2 acquisition to more focus on utilizing the results of EA for pedagogy.

4. *Tensei-jingo* (天声人語) is a translation of the Latin phrase as Vox populi, Vox dei (The voice of the people is the voice of the gods). This is a daily newspaper essay column written by the Asahi Shimbun editorial writer. The Asahi Shimbun is one of the quality papers in Japan and *tensei-jingo* has been frequently used in the university entrance examinations.

5. *Ki-sho-ten-ketsu* (起承転結) is a rhetorical pattern used in Japanese spoken and written texts: introduction (*ki*), development (*sho*), twist (*ten*), and conclusion (*ketsu*).

6. The Toulmin-Model is the model of argumentation developed by Stephen Toulmin (1958). This model illustrates how an argument is structured, and consists of three elements; *claim*, *data* (or evidence) and *warrant*.

7. *Sho-ron-bun* (小論文) refers to a short essay, which many universities often require at their entrance examination. Students are supposed to express their opinions based on their critical analysis regarding the topic given.

3. Study Objectives and Research Questions

As described in the previous chapters, under the new school curriculum guideline (the Course of Study) and the new entrance examination which tests L2 writing ability, along with the other three abilities beginning in the fiscal year of 2020, MEXT (2018b) has stressed that English education should place more emphasis on "promoting the logical ability to think." In addition, although MEXT (2018c) also requires universities to improve students' English language skills necessary to achieve both academic study and research, there is a serious situation where Japan has been losing a momentum in the number of published papers (Wagner & Jonkers, 2017). Since research papers have a logical structure (Kinoshita, 1981), in particular, it will be more necessary to improve students' skills of writing logically in English to increase the competitiveness in the globalized academic and research environment. Therefore, in teaching L2 writing, it is an urgent task for teachers at both secondary and tertiary schools today to come up with effective instruction of writing logically in English (Kawano & Nagakura, 2018; Otsuka, 2016). Under these circumstances, studies on the text organization of Japanese EFL students are of critical importance, including those aimed at identifying logical anomaly. As described in the previous sections, there has been numerous studies to identify linguistic features of Japanese university EFL students. However, thus far, few studies have attempted to investigate the rhetorical features of English texts written by Japanese students, both quantitatively and qualitatively, in the hope of identifying logical/rhetorical patterns unique to them. In addition, there has been little research to pinpoint what types of rhetorical anomaly or coherence break occur in English texts written by Japanese students, or the reasons behind them.

The purpose of this study is to identify the features of English essays written by Japanese EFL students in terms of logical/rhetorical structure and organization. To achieve this goal, this author has established two study objectives.

RQ1. Are there any noticeable patterns of rhetorical organization among the students at three different English proficiency levels as well as their different English writing backgrounds?

RQ2. Are there any noticeable rhetorical anomalies identified in students' English essays? If so, what are the reasons behind them?

In order to find the answer to the RQs, this author has developed four analytical frameworks, which are described in Chapter 5. The frameworks include 1) Structural-Functional Analysis, 2) Rhetorical Structure Theory (RST) Analysis, 3) Metadiscourse Markers (MDM) Mapping, and 4) Keywords-Chain Analysis. These frameworks are largely prescriptive in that they reflect the typical patterns and conventions of English essays written by NSEs. These prescriptive models, however, are useful to illustrate and highlight how Japanese (students) write their English text and why.

As previous research on contrastive rhetoric suggests (e.g., Kaplan, 1966), there might be positive or negative transfer from L1 (Japanese) to L2 (English) and vice versa. In this regard, rhetorical problems found in the English essays written by Japanese students may be attributed to their L2 ability, L1/L2 instructional background, or the L1 rhetorical patterns that Japanese students intrinsically possess or any combination thereof. Since L1 writing instruction students received is one of the influential factors, their Japanese way of logical construction (e.g., *ki-sho-ten-ketsu,* or *inductive-reasoning, personal involvement,*

explained in Note 4 of Chapter 2) inevitably influences their English texts. Thus, it can be hypothesized that some types of logical anomaly detected in English texts may be partly attributed to the rhetorical conventions typical of Japanese writing. In order to examine this point, comparisons of L1 and L2 texts are conducted.

In addition, as important learner variables presented in previous studies (see **2.1**), influences regarding students' L2 proficiency and their L2 writing background are also looked into. The data for this investigation is the essays written by different groups of students regarding L2 proficiency, the L2 writing instruction they have received, and their L2 writing experience. These different learners' attributes might enable us to identify the reasons influencing the quality of their writing.

4. The Design and Development of KUBEC

    This chapter has a brief overview of the project from which this author obtained the data for the current study. Further information of this project can be referred to Yamanishi, Mizumoto and Someya (2013), and Yamashita (2014).

4.1 The Aims of the Project

    The Kansai University Bilingual Essay Corpus (KUBEC) Project officially started in 2012 at Kansai University in Osaka, Japan, and continued for five years until the end of 2016. The purposes of this project include (1) collecting essay data written in both English and Japanese on 13 different topics by Kansai University students and compiling them into a large-scale bilingual corpus, and (2) analyzing the corpus data from various viewpoints such as lexical, syntactical, organizational, and rhetorical to properly assess and gain insights into the students' linguistic and composing competences in English.

4.2 Corpus Design and Data Collection

4.2.1 Unique Characteristics of KUBEC

    KUBEC has six major features. Firstly, this corpus was modelled after the two major learner English corpora in Japan, that is, NICE and ICNALE (See 2.2.1 for details). To ensure that KUBEC was comparable to these corpora, it used the same methods of data collection, including the same essay topics, conditions of data collection, and information regarding student attributions such as age, gender, major field of study, experience of studying abroad, English proficiency, and so on. Among the 13 topics, topics 1 to 11 are taken from NICE and topics 12 (Part-time job) and 13 (Smoking) from ICNALE. Due to this similarity, KUBEC is highly comparable to these two learner corpora.

The second feature of KUBEC is that it contains 60 kinds of writers' background information and text attributes as part of the corpus. Regarding students' attributions, a questionnaire survey was conducted at the beginning of each school year, using an online form (See Appendix 1), which was based on the format used in the NICE project. Participants in this questionnaire was voluntary, and the data collection was conducted based on the students' informed consent. As of 2014, this online form was incorporated into the revised KUBEC Project webpage. The personal data collected via this form included the following: student number, gender, major field of study, years of learning English and other languages, English proficiency (i.e., either of TOEIC, TOEFL, IELTS scores, or EIKEN grade), experience of living and studying abroad, frequency of English use (for each of reading, writing, listening, speaking), and so forth. The text attributes include word type, token, TTR, number of words and sentences per essay, vocabulary levels as measured by JACET 8000 and readability scores.[1] Project members believed that this information would enable them to examine essays written by the participating students from various perspectives.

The third feature is that KUBEC is the largest learner corpus in Japan. As of the end of 2014, the English part of KUBEC (KUBEC-E) contained approximately three million words, while the Japanese part (KUBEC-J) contained more than six million *kana-kanji* characters.

The fourth unique feature of KUBEC is that it is a bilingual corpus of learners' L1 (i.e., Japanese) and L2 (i.e., English) data. The existing learner corpora are essentially monolingual in that they contain learners' L2 data only. Previous studies with those corpora focused predominantly on comparing native and non-native language to identify the features and patterns of the "non-nativeness" of the language used by L2 learners, mostly in

terms of both the over and underuse of specific linguistic items or structures (see CIA in **2.2.1**). These studies have undeniably provided invaluable findings on the nature of L2 texts as well as the problems that learners encounter with their L2. However, L2 texts alone do not provide deeper insights into the reasons behind learners' problems. These problems may simply be developmental, or they may be rooted in the learners' L1. Therefore, project members decided to add L2 data since they believe that investigating learners' L2 texts in comparison to their L1 counterparts will prove extremely useful in the area of EFL writing.

KUBEC also has "Review Comments" (see **4.2.3**) in which students write about what they learned from writing sessions and review sessions. These comments show important information about, for instance, what students noticed while writing or what they tried to write but failed to and why. We expect to know what they learn from the course over the years.

The final feature is an easy-to-use online interface created for both students and instructors/researchers. Students wrote their essays directly onto the project website and submitted them via the Internet. The main benefit of setting up such an online system is that it allowed all students to write and submit their essays under the same working environment and conditions. For the instructors and researchers, the major benefit of the online system is that the data can be downloaded in Excel spreadsheet format, allowing a number of sub-corpora to be created that are sorted by specific user and/or textual attributes, such as Year, Class, Gender, Experience of studying abroad, English proficiency, Topic, Version (i.e., original or revision), and so on.

4.2.2 Participants

The participants of the KUBEC Project comprised two groups: students from the Faculty of Foreign Language Studies of Kansai University (KU) attending "English Writing II" (divided into five classes) and students from the Faculty of Law of the same university attending "English III" (one class only). All participants signed a consent form via online to participate in the project (See Appendix 1: Student Consent Form). It was ensured that students had the right not to participate in this project, and either participation or non-participation in this project would not influence their academic results.

The students in the former group (hereafter referred to as G-group[2]) had taken a compulsory course, "English Writing I," in their first year at Kansai University. In this introductory course, they had learned the basics of English essay writing such as the structure of a paragraph and types of paragraphs. In their second year, the students went to one of Kansai University's affiliated universities in English-speaking countries[3] to study English for approximately ten months as part of the Faculty's study abroad (SA) program. All of these universities offered writing classes, for which students were required to write relatively extensive academic essays and reports in English. Upon returning to Japan, most students took "English Writing II" in their third year to further improve their writing skills, and this was where the data for G-group was collected.

On the other hand, the students in the latter group (hereafter L-group) had no prior experience of taking a college-level academic English writing course, and only a few of these students had either studied or lived abroad.[4] They took "English III," an introductory writing course offered to non-English major students at Kansai University, as a compulsory course in their 2nd year.

The two groups belonged to different cohorts in terms of their English proficiency. The G-group was considered to have intermediate to upper level English, with TOEIC scores ranging from 580 to 920 ($M = 760.55$, $SD = 77.13$), while the L-group was beginner level, with TOEIC scores ranging from 382 to 536 ($M= 459.81$, $SD = 77.52$).[5] Table 4-1 shows number of participants of this project from 2012 to 2014.

Table 4-1.

Participants Data of KUBEC Project from 2012 to 2014

	2012		2013		2014	
G/L groups	G	L	G	L	G	L
Total number of students	150	17	160	9	153	29
Male	54	9	50	5	40	16
Female	96	8	110	4	113	13

As described in this section, there was a clear difference between the G-group and L-group in terms of L2 proficiency and L2 writing backgrounds. The G-group had higher English proficiency than the L-group. The former group had already received L2 writing instruction as well as L2 writing experience, compared to the latter group which did not. The reason why the author used the essays written by the KUBEC students was that investigation into the essays written by the college students could reveal the relations between the quality of the essays and these variables (e.g., L2 proficiency and L2 writing background students received in their secondary school). Because of the differences, the essays written by the two groups, G-group and L-group, were considered to be the best suitable data for investigation. In addition, these were the classes for which this author was directly able to access and obtain data.

4.2.3 Data Collection Scheme "English Writing II" and "English III" Classes

In terms of the contents and data collection procedure, the "English Writing II" (G-group) and "English III" (L-group) classes were basically the same. The aims of the "English Writing Ⅱ" class included 1) students will be able to improve writing skills, by paying attention to grammar, vocabulary, rhetorical organization, and intercultural pragmatics; 2) students will be able to write English essays with more than the required number of words under a time-constrained situation; 3) students will be able to review their essays objectively and revise if necessary. The unique feature of this class was "writing bilingually," which meant students were required to write essays both in English and in Japanese under the same topics. The topics were 1) Environmental pollution; 2) Violence on TV; 3) Young people today; 4) Suicide; 5) Sports; 6) School education; 7) Recycling reusable materials; 8) Money; 9) Divorce; 10) Death penalty; 11) Crime; 12) Part-time job; and 13) Smoking. Topics 1 to 11 were taken from NICE, and topics 12 and 13 from ICNALE. In each class, students first wrote an English essay in 60 minutes and then a Japanese counterpart in 30 minutes. They were expected to write 300 words or more for the English essay and 800 characters or more for the Japanese. For the 2012 project, students were allowed to use a dictionary when writing their in-class essays. However, dictionary use in classroom sessions was prohibited from 2013. The negative aspect of this restriction was offset by allowing the students to prepare revised versions of their essays at home where they were free to use any reference material they desired. Furthermore, no time limit was imposed on the students when writing revisions.

Figures 4-1 and 4-2 are examples of the internet interface for the students. Before submitting their essays, students were able to check the number of words, sentences and paragraphs as in Figure 4-2.

Students were instructed that their Japanese essays should not be word-for-word translations of their English essays, but should, rather, be written in natural Japanese. There was a high possibility, however, that students think and plan in Japanese for their writing in English (Kobayashi & Rinnert, 1992, Sasaki, 2000), and particularly in the "English-first-and-then-Japanese" order, their Japanese essays could be very similar to their English counterparts in terms of content and organization. They typed their essays on the computer and uploaded them onto the designated website created for this project.

Figure 4-1. Students' site for English essays in KUBEC project page.

Figure 4-2. The final site for uploading in the students' site.

In the following week, in the lesson called "Review Session", one or two of the students' essays were chosen for in class review. Students reviewed both English and Japanese essays from such points as word choice, grammar, style, organization, contents and intercultural pragmatics. They discussed how to revise their essays guided by the instructors in the class. The role of the instructors was not to directly revise the essays but to provide "scaffolding" to help students notice errors or problems contained in the essays and revise them by themselves. Instructors elicited correct forms of grammar, for instance, but did not teach them directly to the students. The goal of the instruction was not so much as to teach the students how to write native-like or error-free essays, but to cultivate students' meta-linguistic skills so that they would be able to review both of their English

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and Japanese essays critically and express themselves in writing appropriately and effectively in terms of lexis, syntax, and rhetorical convention.[6]

At the end of the class, students wrote "Review Comments" in which they write about what they learned from the review session. This was an awareness-raising exercise so that the students become more aware of what they learned and hopefully would be able to make their own essays better in the next writing session. Their comments were also uploaded onto the web database. In 2012, the writing session and review session were alternated every week under the 13 topics. This was the basic flow of this course. However, instructors pointed out that from the perspective of "process writing" where text should be re-written and re-edited several times until the final product is submitted, pedagogical effects of the writing system in 2012 could have been weak. Thus, in 2013, students were required to re-write both of their essays as their homework and uploaded them before the beginning of the next writing session. Table 4-2 shows the conditional differences between G-group and L-group from 2012 to 2014.[7]

Table 4-2.

Conditional Differences between G-group and L-group

		G-group	L-group
Departmental affiliation		Faculty of Foreign Studies (English major)	Faculty of Law (non-English major)
Year		3rd year	2nd year
Study abroad experience		Yes	No
English proficiency level		Intermediate to Advanced	Beginner to Lower Intermediate
Dictionary use in class	2012	Yes	Yes
	2013	No	No
	2014	No	No
Revisions	2012	No	No
	2013	Yes	Yes
	2014	Yes	Yes

In sum, both G and L groups wrote both the English and Japanese essays under the same conditions, but their English proficiency levels differed. In 2012, both groups were allowed to use dictionaries, but thereafter, dictionary use was prohibited and the submission of revisions as homework was made mandatory.

4.2.4 Overview of the Target Writing Classes

In this section, the details of each writing class from 2013, a part of the data from which are used in this thesis, are described.

As mentioned in the previous section, in 2013, to avoid the influence of reference use on the quality of English essays, dictionary use was prohibited in both G and L-groups. It was also made mandatory to submit revised essays, uploaded onto the designated website, within a week of the review session.

Appendices 2 and 3 show the essay data and review comments written by the G-group and L-group respectively. For English essays in the G-group, there were 1,946 original essays and 1,533 revised essays. The total number of words was 617,432 words and 523,606 words respectively. The average number of words per essay was 317.17 words and 340.86 words respectively. For the Japanese essays, the total number of original essays was 1,875 and 1,488 revised essays. The total number of characters was 1,396,427 characters and 1,228,317 characters respectively. The average number of characters per essay was 743.80 characters and 823.99 characters respectively.

In the L-group, the total number of English original essays was 127 and 111 revised essays. The total number of words was 29,843 words and 34,407 words respectively. The average number of words per essay was 235.38 words and 310.42 words respectively. For the Japanese essays, the total number of original essays was 125 and revised essays was 112.

The total number of characters was 69,721 characters and 92,849 characters respectively. The average number of characters per essay was 561.70 characters and 827.38 characters respectively.

The average number of words differed depending on the topic. In the G-group, the topics of "Young people today," "Suicide," "School education," "Money," "Divorce," and "Part-time job" were longer in both languages. On the other hand, the L-group students wrote longer essays on the topics of "Young people today," "Sports," "Money," "Death penalty," and "Crime," in English, and on "Violence on TV," "Young people today," "Sports," "Suicide," "Money," and "Divorce" in Japanese.

The differences in the average number of words/characters demonstrated that the G-group students wrote much longer essays in both languages. As shown in Table 4-3, there were the group differences in 81.79 words and 182.1 characters in original essays, respectively. As to the difference between the original and revised essays, the differences in the number of words/characters comprised 23.70 words and 80.19 characters in the G-group essays, and 75.04 words and 265.68 characters in L-group essays, respectively. This suggests that students tried to write longer revised essays by adding what they had intended but failed to write under the time-constrained conditions of the in-class writing sessions. The difference in the number of words between the original and revised essays was by far larger in the L-group than the G-group, indicating that the L-group students were unable to produce the designated number of words/characters in class; thus, they offset their deficit in the revision.

Table 4-3.

Comparison of Average Number of Words/Charts per Essay Between G- and L-groups in 2013

	English Essays (words)			Japanese Essays (chars.)		
	Original	Revised	Difference	Original	Revised	Difference
G-group	317.17	340.87	23.70	743.80	823.99	80.19
L-group	235.38	310.42	75.04	561.70	827.38	265.68
Difference	81.79	30.45		182.10	-3.39	

Notes

1. In addition to students' personal information (described above), KUBEC also contains information regarding Vocabulary Level Profile (VLP) and Part of Speech (POS) for each English essay.

2. "G" was taken from the name of the writing class. There were five "English Writing II" classes from G3-1 to G3-5.

3. To be specific, students studied at the universities affiliated to the Faculty of Foreign Language Studies of Kansai University.

4. Regarding experience of studying abroad, only one L-group student in 2013 responded that they had spent less than one year abroad; however, it is uncertain whether or not they studied English while abroad and had experience of writing extensively.

5. These are the scores from a mini-TOEIC test developed for writing classes in 2014. It takes only 30 minutes to complete; however, the scores are correlated to those generated from TOEIC®. The G-group can be termed a so-called "special group" in which students had received intensive English education; on the other hand, as the average score of university students in sophomore years is reported to be 438 (TOEIC Data and Analysis retrieved from http://www.iibc global.org/library/default/toeic/official_ data/lr/pdf/DAA

.pdf), the L-group is considered representative of ordinary students who receive English education in Japan.

6. Instructors/Researchers in this project were Yasumasa Someya, Hiroyuki Yamanishi, Atsushi Mizumoto, Cizuko Tsumatori, and Kosuke Sugai. In order to ensure consistency of instruction, Prof. Someya compiled a teachers' manual under which project members conducted their classes. The sample essays chosen by him were used for class discussion in "Review Sessions." Meetings were held twice a year in the beginning of each semester to remind instructors of the details of instruction, and when revisions were made, they agreed on them at these meetings.

7. From 2013 onward, video recordings were introduced to capture and thereafter examine the students' writing process. Previous studies (Cumming, 1989; Krapels, 1990; Silva, 1993; Sasaki, 2000) have used *think-aloud protocols* in which participants are asked what they are thinking while writing, or *stimulated-retrospective protocols* in which the process of writing is video-recorded. However, these methods have been criticized as "intrusive" or "stressful" by participants; therefore, in the target writing classes, to reduce the stress of being recorded, we adopted *Debut Video Capture Software* (downloadable from http://www.nchsoftware.com/capture/jp/index.html), which automatically records students' writing process on the computer. The data of recordings were also stored on the project website. Yamashita (2013) conducted a pilot study on writing process using this software.

5. The Four Analytical Frameworks

5.1 Theoretical Background: Text Coherence and Cohesion

Before the detailed description of the four analytical frameworks, the theoretical foundation of the frameworks is discussed in this section. This author looks at the conditions under which an English text is logically organized. As discussed in **2.3**, text organization is defined from the two notions of coherence and cohesion. Cohesion is defined as the linguistic feature that helps to make a sequence of sentences into a text (Halliday & Hasan, 1976). Coherence, on the other hand, refers to the overall discourse-level property of unity or how well a text holds together (Hasan, 1984; van Dijk, 1980). As to coherence, Kintsch and van Dijk (1978) argued that the semantic structure of a coherent text is characterized at two levels: namely, at the macrostructural and microstructural levels. The former refers to a global level of organization, while the latter considers the semantic relations between sentences, or relations between propositions expressed by these sentences. Oshima and Hougue (2006) argued that a paragraph is a basic unit of every English text and discuss two notions of coherence and cohesion as follows:

1. A paragraph is a group of related sentences that discuss (and usually only one) main idea. (p. 2)

2. All paragraphs have a topic sentence and supporting sentences, and some paragraphs also have a concluding sentence. (p. 3)

3. Unity means that a paragraph discusses one and only one main idea from beginning to end…The second part of unity is that every supporting sentence must *directly* explain or prove the main idea. (p. 18)

4. Another element of a good paragraph is coherence. The main verb *cohere* means "hold together." For coherence in writing, the sentence must hold

together; that is, the movement from one sentence to the next must be logical and smooth. There must be no sudden jumps. There are four ways to achieve coherence: 1. Repeat key nouns. 2. Use consistent pronouns. 3. Use transition signals to link ideas. 4. Arrange your ideas in logical order. (pp. 21-22)

Based on these notions of coherence, this author examines the macrostructure of organization based on the structural and functional properties of a given essay in the *Structural-Functional (SF) Analysis*, while she examines the microstructure of organization based on the semantic relations between sentences in the *Rhetorical Structural Theory (RST) Analysis*. Cohesion is examined based on thematic keywords and metadiscourse markers (Hyland, 2005) in the *Keywords-Chain Analysis* and the *Metadiscourse Markers (MDM) Mapping*, respectively. In the next sections, each of the above four analyses will be described in detail.

5.2 Structural-Functional (SF) Analysis

The first framework looked at in Study 1 (Chapter 7) was the Structural-Functional (SF) Analysis. A well-constructed essay has the basic structural organization shown in Figure 5-1 (Oshima & Hougue, 2006; Someya, 1994).[1] As this diagram (Someya, 1994) indicates, an essay consists of three structural parts: an introductory paragraph, a body, and a concluding paragraph. The body can include as many paragraphs as required, but three is the most typical and recommended number of paragraphs. Each paragraph also has three major functional parts as shown in Table 5-1: a topic sentence (TS), supporting sentences (SSs), and either a concluding sentence or a transitional sentence (CS/TRS). Each SS can be supplemented by extensions (or EXs), which elaborate on the SS. The TS and SS are obligatory, but the CS, TRS, and EX are optional. The introductory paragraph generally

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starts with an introductory statement (INT) followed by a thesis statement (THS) which is an obligatory component. The thesis statement is usually restated in the first part of the concluding paragraph in the form of a summary (RTHS). The kicker (KK) at the end of the concluding paragraph is optional, but students are recommended to conclude an essay by offering a suggestion, giving an opinion, or making a prediction relevant to the thesis statement if and when appropriate to do so.

Using this model, the Structural-Functional Analysis (or SF Analysis) was first conducted to examine whether students' essays included these structural and functional components. Each paragraph was then examined to ascertain whether or not it contained these SF components (e.g., THS, TS, and SS), more precisely by counting the number of SF components. The way in which these components were aligned was also examined. By investigating the sequence of SF components, it was possible to discern whether or not the paragraph was logically organized. The author assumed that this simple analysis would provide a good indicator of the successful organization of an essay.

Introductory Paragraph	INT+THS (+ORG)
Body Paragraph 1	TS+SS$^{1\sim n}$ (+EXs) (+CS/TRS)
Body Paragraph 2	TS+SS$^{1\sim n}$ (+EXs) (+CS/TRS)
Body Paragraph n	TS+SS$^{1\sim n}$ (+EXs) (+CS/TRS)
Concluding Paragraph	RTHS (+KK)

(*elements in parentheses are optional)
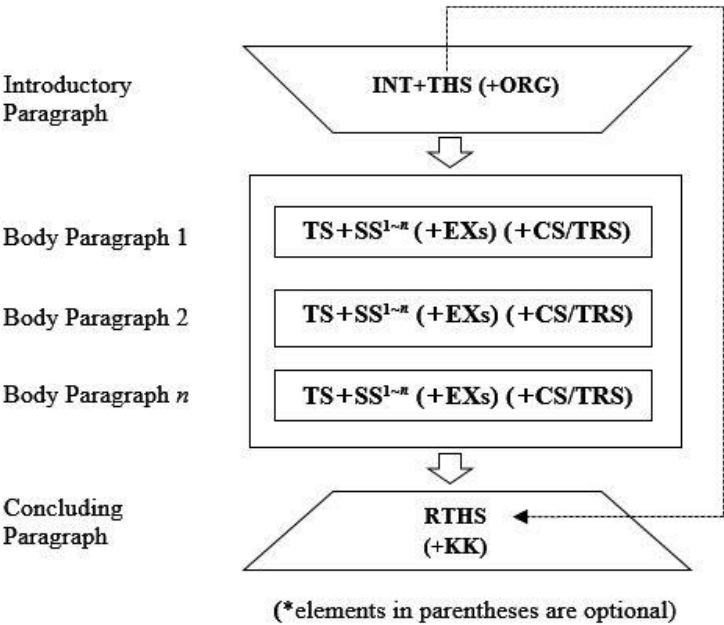
Figure 5-1. Typical structure of an English essay.
Adopted from Someya. (1994). Figures 134 and 135, Writing Marathon, Week 15, Vol.4, p. 147-149.

Table 5-1.

Structural-Functional Properties in Each Essay Paragraph

Paragraph	Sentence Component	Definition
Introduction	Introductory sentence (INT)	Sentences that contain background information related to the thesis statement.
	Thesis statement (THS)	Sentence containing the main idea of the essay.
	Organizer (ORG)	Sentence containing information regarding the trajectory of the essay.
Body	Topic sentence (TS)	Sentence containing the main idea of the paragraph.
	Supporting sentence (SS)	Sentences containing supporting information for the main idea.
	Extender (EX)	Sentences containing extended information for the supporting sentence.
	Concluding sentence (CS)	Sentence summarizing the ideas described/discussed in the paragraph.
	Transitional sentence (TRS)	Sentence that functions as a bridge between ideas described/discussed.
Conclusion	Restatement of thesis statement (RTHS)	Sentence restating/rephrasing the thesis statement.
	Final statement or Kicker (KK)	Sentences that conclude the essay by, for instance, offering writer's opinions as to future implications of the ideas discussed.
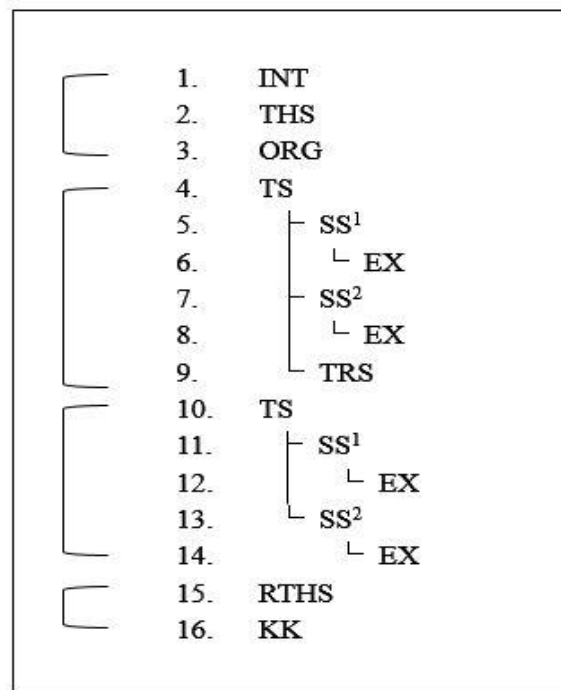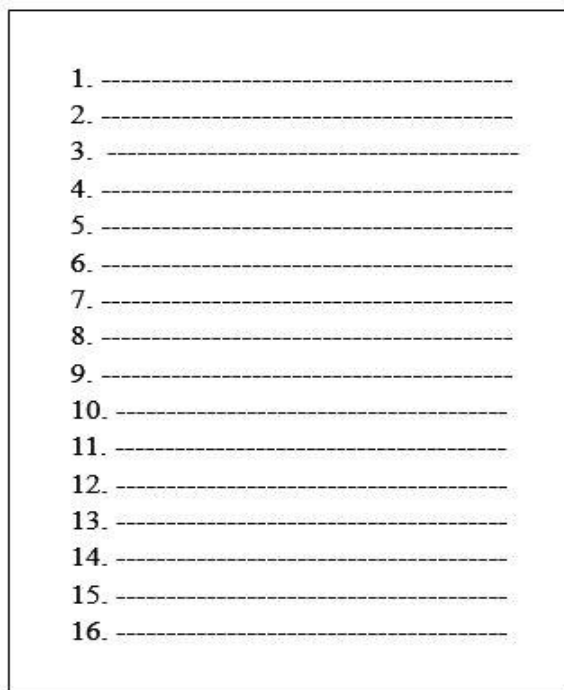
Figure 5-2. Hypothetical essay.

Figure 5-3. Functional structure of the hypothetical essay.

The hypothetical essay in Figure 5-2, for instance, can be functionally analyzed as Figure 5-3, indicating that this hypothetical essay is very well constructed with all the components that together create a sequence of well-placed sentences in a text.

5.3 Rhetorical Structure Theory (RST) Analysis

The second framework used in Study 1 (Chapter 7) was the Rhetorical Structure Theory (hereafter RST) Analysis. This is a theory of text organization originally proposed by Mann and Thompson (1988). The basic idea of RST is that a text can be divided into parts, and the theory describes how those parts can be rhetorically arranged and connected to form a cohesive text.

In RST, the relationships between parts of a text, termed *text spans*, are crucial to construct a single unit of text, and these relationships can be between clauses, sentences, or units larger than sentences. A text is generally broken into two spans: namely, the *nucleus*, which presents essential information in the text, and the subordinate span termed the *satellite*, which presents supporting or background information (Mann & Thompson, 1988). The original list of rhetorical relations of these spans numbered 25 relations; however, this was subsequently expanded to 75 relations (Carlson & Marcu, 2001). The relations between the following two sentences (S1 and S2), for example, can be described as in Figure 5-4 by using an RST diagram. These two sentences are connected by the rhetorical relation *evidence*, where S1 is the main statement, or nucleus, and S2, the satellite, provides supporting evidence for S1.

S1: Jogging is not as easy as it appears.

S2: Ninety-seven percent of people cannot jog three miles without stopping.
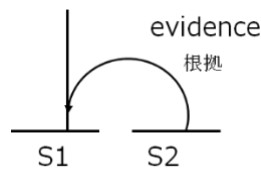
Figure 5-4. RST diagram showing the rhetorical relationship between S1 and S2.

Although in RST studies, the unit of analysis is basically a clause (Carlson & Marcu, 2001), in this study, the sentence is used as the unit of analysis. A close examination of the semantic relations between the clauses reveals much more intricate semantic relations within the sentences; however, rather than investigating the individual relations between clauses, which tend to be very complicated, this study aimed to examine the semantic relations between SF tags (see Table 5-1) or between sentences, and to examine the overall flow of the argument within the paragraph and ultimately the entire essay. When two sentences are joined with coordinating conjunctions (e.g., *and, but,* and *so*), the sentence either before or after the conjunction, which carries the most important information, was selected for tagging. In other words, the ultimate goal of this analysis was to grasp the macrostructure of logical organization and coherence or *unity* within the paragraph and the essay (Kintsch & van Dijk, 1978; Oshima & Hougue, 2006), and to make the knowledge gleaned useful for teaching the logical organization of an essay. Another noteworthy point is that the RST relations in this study do not necessarily refer to the relations between the first and second sentences, which comes immediately before or after the first sentence; they sometimes refer to the relations between sentences that lie far apart or beyond the paragraph level.

The RST framework was originally developed to analyze coherent texts written by NSEs; however, Skoufaki (2009) first attempted to use RST for coherence error or anomaly detection in 45 paragraphs written by Chinese ESL students. Ahmadi and Parhizgar (2017) examined 64 Iranian EFL learners' essays in descriptive and argumentative genres and found eight different types of coherence error, more types than Skoufaki's results. Therefore, a pilot study was conducted by this author (see **5.6**) to examine the applicability of the theory to Japanese students' English texts in order to identify both rhetorical anomalies and the semantic relations of the sentences in the texts written by Japanese students.

5.4 Keywords-Chain Analysis

The third framework focusesed on the content, specifically the topic of propositions, or topical/thematic coherence (Hymes, 1974). *Topic* is also known as "subject" (Bygate, 1987) and it refers to "whatever it is that is being talked about" (Brown & Yule, 1983, p. 62). Topic is focused upon because it is a crucial aspect of context (Hymes, 1974) and governs how language is used to help the reader understand the context smoothly (Cazden, 1970). The identification of topics relies on the identification of predominant keywords (Scott, 1997). Key lexical items recur with a frequency indicative of topic prominence, and Hoey (1991) identified recurrence of lexical items through repetition, paraphrasing, pronominalisation, or by means of such cohesive devices as reference and ellipsis as suggested by Halliday and Hasan (1976). He then drew up a network of bonds between the key lexical items. Watson (1998) also approached topic identification by drawing up a semantic network of lexical items. He made up line diagrams with the key lexical items

categorized by Halliday and Hasan (1976) in order to highlight the semantic relations between topics.

Study 2 (Chapter 8) was based on the idea of topical/thematic coherence. Two types of keywords were investigated: theme-setting keywords (TKs) and argument-setting keywords (AKs). The former keywords are related to the given theme of an essay or that chosen by the writer, while the latter are related to the arguments developed under the theme. These are the words that appear recurrently, in inflected forms, as synonyms or near-synonyms, or those belonging to the same semantic category.

As for the words in the same semantic category, this study also included items related to content schemata (Hudson, 1982; Watson, 1998). For example, *studies, grades, class,* and *course* were all considered to belong to the "school schema;" thus, they are in the same semantic category. In this study, pronominal forms are excluded and only recurrence of key content words were counted.[2] These keywords were connected by lines, which results in a "keywords-chain" – a visual representation of the connectivity or cohesion of the target text (Halliday & Hasan, 1976). Figure 5-5 shows a diagrammatic representation of a keywords-chain where *college students* and *part-time jobs*, for example, represent two major TKs, while *experience*(*s*)*, study* (*studies, studying*)*, time,* and represent some of the major AKs present in the text. The hypothesis here is that a well-connected chain of keywords is an indicator of the essay being well developed (Oshima & Hougue, 2006). In this respect, this author examined the types and number of both keywords in **8.2.1** and examines how these keywords are connected in **8.3**.

<1st paragraph>

1. In Japan, a lot of **college student** work at part-time jobs.

2. Some people say **college students**, however, should stop working.

3. That is because these people think that **college students** cannot concentrate on their studies.

4. In my opinion, **college students** should experience working at part-time jobs because they can gain experience that they cannot attain only by studying in the university.

<2nd paragraph>

5. Some people say that **college students** cannot perform well at school because they work at part-time jobs.

6. It is said that **college students** use all of their free time for working and therefore they do not have the time to review for their academic studies.

7. Moreover, some of them prioritize their part-time job that sometimes they do not attend their class.

8. These lead them to get poor **grades** at their studies and some even fail their **course**.

9. That is why some people believe part-time jobs are not good for **college students** to do.

<3rd paragraph>

10. I believe **college students** should work for part-time job because they can experience things that they cannot do inside the university.

11. In the university, **students** can experience to study academic things, join clubs or circles and participate in the university's events.

12. Compared to these, **students** can experience the hardships to earn money when they work.

13. In addition, the people they communicate with at part-time jobs are not only teachers and fellow students.

14. The experiences they get from part-time jobs can help them improve themselves in different ways.

15. For example, they can learn how to communicate effectively with people who have different range of age.

16. This cannot be experienced by only studying inside the university.

<4th paragraph>

17. The appropriate solution for **college students** who fail at their studies because of part-time jobs is to make these **students** learn how to discipline themselves.

18. They should learn how to manage their time.

19. It is important for them to know how much time they should use for studying and for working at part-time jobs.

20. Making them stop working will only result for them to lose the chance of experiencing many things outside the university.

<5th paragraph>

21. In conclusion, although some people say that part-time jobs lower the performance of **college students** at their studies, I believe these **students** should still work for part-time job.

22. That is because they can gain a lot of valuable experiences in their job.

23. The only thing **students** should be careful when they are working at part-time jobs is to learn how to divide the time they use for work and for study.

Figure 5-5. A sample of a keywords-Chain Analysis.

5.5 Metadiscourse Markers (MDM) Mapping

The last framework Metadiscousre Markers (MDM) Mapping was used in Study 2 (Chapter 8). Adopting the idea presented by Hyland (2005) that "writing or speaking is viewed as a social and communicative process between writers or speakers and readers or listeners" (p. 3), this framework investigated writers' linguistic strategies, which are usually manifested in a text through the use and distribution of so-called "metadiscourse markers" or MDMs. Hyland (2005) categorized these markers into *interactive metadiscourse* and *interactional metadiscourse.* The former refers to the resources with which a target audience is likely to find the text coherent and convincing. The latter refers to the resources that involve the reader in the argument and indicate the writer's perspective toward the propositional content (Hyland, 2004). The types of MDM examined in this study comprise *interactive metadiscourse* markers due to their close association to text coherency. They included *code glosses, endophoric markers, evidentials, frame markers (sequencing, label stages, announce goals, shift topic), transition markers*, and others. The items analyzed in this study are listed in Table 5-2. This study specifically examined what kinds of MDMs were used, and in what context, to ascertain whether or not students can use MDMs appropriately in their texts. In other words, how MDMs are mapped in a text, and this is what this author calls MDM mapping. A sample is shown in Figure 5-6. In this essay, *sequencing markers* including *first, second, finally,* and *in conclusion* connected with dotted lines create global cohesion, while MDMs within paragraphs are connected with straight lines, creating local cohesion. Here is another hypothesis that a well-connected chain of MDMs (or mapping) indicates a well-organized text (e.g., Oshima & Hougue, 2006). With this, MDM mapping can provide us with a useful and easy-to-use tool to grasp the logical

development of the text objectively. Types and numbers of MDMs used in students' essays

are examined in **8.2.2** and the way these MDMs are mapped are also examined in **8.3**.

Table 5-2.

List of Metadiscourse Markers (MDMs) Analyzed in This Study

MDM Category	Examples
Code glosses	as a matter of fact, called, defined as, for example, for instance, I mean, in fact, in other words, indeed, specifically, such as, that is, that is to say, that means, this means, which means
Endophoric markers	X above, X before, X below, X earlier, X later
Evidentials	according to, cited, quoted
Frame markers: 1) Sequencing	finally, first, firstly, first of all, At first, The first point is, My (The) first reason is, last, At last, lastly, next, second, The (My) second (reason, point, advantage, case), secondly, subsequently, then, third (point, reason), thirdly, to begin, to start with
Frame markers: 2) Label Stages	in brief, in short, in sum, in summary, overall, so far, to conclude, contention, contend, to sum up, to summarize, Conclusively, In conclusion
Frame markers: 3) Announce Goals	in this essay, This essay, focus, intend to, purpose, objective, seek to, would like to
Frame markers: 4) Shift Topic	in regard to, now, shift to, turn to, with regard to
Transition Markers	accordingly, additionally, Also, alternatively, although, and (And), as a consequence, as a result, at the same time, because (Because), because of (Because of), besides, but (But), by contrast, consequently, conversely, equally, even though, Furthermore, hence, however (However), In addition (to), in contrast, in the same way, lead to, likewise, Moreover, nevertheless, nonetheless, on the contrary, on the other hand, rather, result in, since, so (So), so that, still, the result is, thereby, Therefore, though, thus, whereas, while, whilst, yet,
Others	in this sense, on that condition, that is because, mentioned above, as I mentioned

<1st paragraph>
1. [INT¹] Some people say that college students should not have a part time job so that they can concentrate on studying;
2. [INT²] however, not having a part time job does not mean they can concentrate on studying.
3. [INT³] In fact, many students have a part time job and they make good grades in college.
4. [THS¹] Moreover, having a part time job has many advantages for college students; they can make money by themselves, they can learn many things through a part time job, and they can have various relationships.
5. [THS²] Thus, college students should be encouraged to have a part time job.

<2nd paragraph>
6. [TS] First, college students can make money by themselves by having a part time job, which allow them to have opportunities to do many things.
7. [SS] Students should experience a lot of valuable things while they are college students;
8. [EX¹] for example, traveling around the world is important thing for young people to experience.
9. [EX²] Going to other countries helps students to find their own way to live, and it is one of the most valuable experience new world.
10. college students should travel a lot;
11. [EX⁴] however, it costs a lot also.
12. [EX⁵] Having a part time job and making money allows students to do that.
13. [EX⁶] Although some parents pay all for students to travel, traveling by money that they earned by themselves does have meaning.
14. [EX⁷] They can realize the importance of making money and experience new things.
15. [CS] Thus, making money by themselves is a great thing for college students.

<3rd paragraph>
16. [TS] Second, college students should be encouraged to have a part time job because they can learn many things through a part time job.
17. [EX] When they work for companies, they are responsible for their jobs, even though they are part time worker.
18. [SS¹] College students can learn responsibility through a part time job.
19. [SS²] Moreover, they can experience many things that they cannot do in their college such as selling products, talking with customers, and dealing with problems, though it depends on kinds of job.
20. [EX] It helps them to do well when they get a job in the future, and it also helps them to get a job.
21. [CS] They can learn many things thorough a part time job.

<4th paragraph>
22. [TS] Finally, college students should have a part time job because they can have various relationships.
23. [SS¹] Usually students have a lot of friends in their college or around their hometown, and their friends are often almost same age as them.
24. [EX] Of course it is good thing for college students to have many friends who are same generation as them;
25. [SS²] however, they can meet a lot of people who are very older than them through a part time job.
26. [EX] There are many things that students can learn from older people because they experienced much more than young people, and it is good thing to work together with them.
27. [SS³] Moreover, students might have opportunities to meet important people of companies, [and] it motivates students to make efforts and study.
28. [CS] Having various relationships is great thing for students.

<5th paragraph>
29. [SS] In conclusion, college students should study hard, and they have much time to do many things they want to do.
30. [RTHS] However, college students should be encouraged to have a part time job because they can make money by themselves, they can learn many things through a part time job, and they can spend time with people who they cannot meet in college life.
31. [KK] College students have many things to learn and do, having a part time job allows them to learn and do many things.

Local link

Global link

66

Figure 5-6. MDM mapping of student's essay.

5.6 A Pilot Study to Test Four Analytical Frameworks

A pilot study was conducted in order to test the validity of analytical frameworks.[3] Based on the frameworks, the English essays written by two students at different proficiency levels were analyzed while their Japanese counterparts were also examined with RST. It was found that the four analytical frameworks were, in fact, effective in analyzing the structural and rhetorical features of the English essays written by Japanese students. SF analysis was useful for analyzing the basic structure and functions of sentences in each paragraph of an essay. Text cohesion and the logical development of the argument found was effectively analyzed by means of Keywords-Chain Analysis and MDM Mapping. These investigations were useful to ascertain whether or not the essays in question are properly constructed. However, without a semantic analysis of sentences with RST, it could not be thoroughly recognized whether or not the paragraphs are logically written, or whether logical problems pertain. In the pilot study, the "unknowns" detected from the first framework were found to comprise coherence breaks identified in RST analysis. Thus, the four frameworks can be used together to analyze a text for both its structural and rhetorical/logical properties.

It was also found that RST is useful for identifying "rhetorical anomalies" unique to Japanese students' argumentative essays. The result showed that RST can be applied to the analysis of texts written by Japanese EFL college students, and can be used to identify coherence breaks. The anomalies were labeled "irrelevant ideas," "insufficient information," and "inappropriate word choice." These "coherence breaks" were also identified among the English essays written by ESL students in other studies, although classification was different with Swedish (Wikborg, 1985, 1990), Chinese (Skoufaki, 2009), and Indonesian (Maghfiroh, 2013) students. RST was originally developed for the semantic investigation of

coherent texts written by NSEs. The pilot study proved the applicability of RST to the texts written by non-NSEs, and could also be used for other languages including Japanese. Furthermore, the coherence breaks found in the pilot study were specific to the English essays and were not particularly found in the Japanese essays. This result can be ascribed to the difference in the logical frame between English and Japanese; however, the pilot study did not yet deliver a comprehensive answer, and thus the reasons behind the coherence breaks are investigated further with more bilingual texts in Chapter 9.

After the pilot study was conducted, some revisions in the annotation were made as follows:

Unknown tag: A sentence that cannot be tagged with any SF tag are tagged as "unknown."

Number of RST tags: The original list of 28 rhetorical relations formulated by Mann and Thompson (1988) was used in the pilot study; however, she examined both the RST original list (Mann & Thompson, 1988) and the extended version of 75 relations (Carlson & Marcu, 2001), and narrowed down the list. The final list of 30 relations is given in Appendix 4. In order to create an original version of the list, the author also examined the semantic relations used in the analysis of Japanese texts, including those proposed in Ichikawa (1978) and Nomura (2000, 2002), considering that students' Japanese essays may also be examined. The new RST tags include, for example, *BGRD (Background information), GNES (General statement)*, and so forth. The list also includes *NLOG (No logic),* which is an original tag to mark logical anomalies or logical breaks.

Notation of RST relations: Although an original RST diagram (see Figure 5-4) was used in the pilot study, a simplified diagram as shown in Figure 5-7 has been used in the main study. With this diagram, the RST relations between SF tags within a paragraph can be displayed horizontally which makes relations easier to understand. The diagram in Figure 5-7 shows that the TS is followed by a supporting sentence (SS) in the relation of *elaboration,* which is followed by an extender (EX) in the relation of *restatement.*

RST Diagram	TS - SS - EX ELBR RTRN PRBM
Text	**\<TS: problem to THS\>** *Firstly,* it will ruin the meal for other people. **\<SS: elaboration of TS\>** It may be okay for people who are always smoking when eating at restaurants, but for people who do not smoke, the smell of the cigarette will ruin their meal by making the taste of the food awful. **\<EX: restatement of SS\>** Of course, the most important factor of the food is taste, but the extremely strong smell of the cigarette can easily take away the appetite and also the taste of the food.

Figure 5-7. Revised RST diagram showing the rhetorical relationship in the main study (G1-9, Topic 13).

Typology of rhetorical anomalies: The types of rhetorical anomalies, which were limited in the pilot study, have been expanded in the main study (see Table 9-2 for details).

Having confirmed the validity of the four analytical frameworks, necessary revisions of some annotations were made. The next section will describe the data and the procedure of the main studies.

Notes

1. The reason why this structure was used is that this is probably the most widely-known basic structure of an English essay and is thus used for writing classes. In the case of the argumentative essay, the *rebuttal* is often placed in the final body paragraph. This structure has been criticized as "prescribed" or as a "rigid, arbitrary, and mechanical organizational scheme [that] values structure" (Rosenswasser & Stephans, 2011). In addition, the structure set by the NSEs is not always good for EFL/ESL students. However, the author used this structure as one "model" for the analysis; if no model had been used, it might have been difficult to examine what comprises a high-quality essay or not.

2. Although pronouns were considered to be an important property of cohesion, analysis which includes pronominal forms of nouns could have been complicated due to the number of erroneous usages of pronominal forms in students' essays. In addition, the focus of keywords-chain analysis was to reveal topical chain of organization or cohesion from recurrence of key nouns. Thus, pronominal forms were not included in the current study.

3. The details of a pilot study can be referred to Yamashita (2015).

6. Methods and Procedure

6.1 Essay Data and Participants Background Information

The data used for the main studies comprised of the essays written for KUBEC (ver. 2013). How the data was selected is explained as follows. In order to examine the differences in students' proficiency levels, the data of G-group from KUBEC (ver. 2013) was divided in two subgroups, based on their TOEFL scores.[1] The first subgroup (hereafter G1) consisted of students whose TOEFL scores were 523 or above (N = 84). The second subgroup (hereafter G2) consisted of students with TOEFL scores below 523 (N = 76). In 2013, there were nine students in the L-group; therefore, in order to counterbalance this number, ten students were randomly chosen for each of G1/G2. TOEFL scores of L-group is significantly lower than the other two groups (p < .001, n^2 = .89). Table 6-1 shows the details of the essay data used for the studies.

Table 6-1.

Participants and Their English and Japanese Essay Data (from KUBEC 2013)

		G1	G2	L-group	Total
Number of students		10	10	9	29
Experience of studying abroad		○	○	✕	-
Experience of learning English writing		○	○	✕	-
Average TOEFL score (*S.D.*)		544.0 (14.74)	505.07 (12.04)	445.33 (14.46)	-
Average TOEIC score (*S.D.*)		730 (66.89)	615 (57.17)	428 (43.75)	
Number of essays		20	20	18	58
English essays	Number of words (ave.)	7,703 (385.1)	6,599 (330)	4,329 (240)	18,631
	Number of sentences	452	393	321	1,166
	Number of paragraphs (ave.)	94 (4.7)	88 (4.4)	63 (3.5)	245
Japanese essays	Number of characters (ave.)	7,323	8,019	5,699	21,041
	Number of sentences	325	402	269	996
	Number of paragraphs (ave.)	82 (4.1)	73 (3.9)	52 (2.8)	207

The participants' background information was gained from the results of the questionnaire survey conducted in the first lesson of each class in the online consent form (see **4.2.1** and Note in Appendix 1 for details). Table 6-2 shows the results of the survey from Q10 to Q13 (see Appendix 1). The answer to Q12 (experience of English composition) confirmed that G-group students were taught about English writing and intensively wrote essays during the SA program before taking "English Writing II." As shown in Q10 (frequency of use in four skills of English at the time of the survey), even after the SA program, G1 and G2 students used English more frequently than L-group students. However, the answers to Q13 (ability of writing a composition in English) showed contradictory results among the G-group. Although most of the students reported their confidence in writing English essays, there were some who responded that their L2 writing ability was "somewhat weak." It was noticed, from students' comments in the survey, that G-group students had learned *Academic English writing* over the past years, which made some students feel that it was more difficult to write in English in terms of vocabulary choice, expression appropriate to the content, and style. On the other hand, L-group students apparently had little experience in writing in English, and most of them answered that their ability of L2 writing was "very weak," showing no confidence or even strong anxiety towards English writing classes. Regarding the ability of Japanese writing (Q11), there was not much difference among the groups since most of the students reported that their Japanese writing skills were "somewhat weak."

Table 6-2.

The Results of Questionnaire Survey Regarding English/Japanese Writing

from Q10 to Q13

Group	N		Q10. Use of English in the following four areas			
			Reading	Writing	Listening	Speaking
G1	10	*M*	3.56	2.69	3.88	2.94
		S.D.	1.22	0.77	0.86	0.66
G2	10	*M*	3.00	2.79	3.71	2.86
		S.D.	0.93	0.86	0.70	1.06
L	9	*M*	2.56	1.89	2.66	1.88
		S.D.	1.25	0.87	1.15	0.87

Group	N		Q11. Ability of Japanese writing	Q12. Experience of English writing	Q13. Ability of English writing
G1	10	*M*	2.38	3.75	2.50
		S.D.	1.11	0.66	1.00
G2	10	*M*	2.36	3.50	2.21
		S.D.	0.89	0.63	0.77
L	9	*M*	2.00	1.66	1.33
		S.D.	0.94	0.82	0.47

Note. Q10 and 12 provided a 5-point Likert scale including 1= none, 2= almost none, 3=sometimes, 4=weekly, 5=almost daily. Q11 and 13 had a same scale including 1=very weak, 2=somewhat weak, 3=normal, 4=somewhat strong, 5=very strong.

6.2 Essay Task and Essay Evaluation

The data used for the analysis consisted of argumentative essays written on two different topics, that is, Topics 12 and 13. The argumentative essay was chosen as a genre for analysis in this study because it has been reported to be one of the most difficulty for L2 students (Gilbert, 2004). Furthermore, according to Oi (2005), argumentative essay is the second most popular task assigned in university writing classes next to summary writing.

The following prompt taken from the ICNALE project was given for both Topics 12 and 13.

Prompt: Do you agree or disagree with the following statement? Use specific reasons and details to support your opinion.

Topic-12. Part-time Job

[Instruction] *Some people seem to believe that college students be encouraged to have a part time job, while others insist that students should concentrate on studying while in college. Decide your position on this matter and write an essay defending your position.*

Topic-13. Smoking

[Instruction] *Some people seem to believe that smoking should be completely banned at all the restaurants in the country, while others insist that smokers' rights should also be respected. Decide your position on this matter and write an essay defending your position.*

Topic 12 was written in the sixth writing session in the spring term, while Topic 13 was written in the 13th session in the fall term of 2013.

To examine the quality of essays depending on the proficiency levels of each group, American instructors (see **6.3**) evaluated essays based on an evaluation rubric (see Appendix 5), a revised version of the ESL Composition Profile (Jacobs, Zinkgraf, Wormuth, Hartfiel, & Hughey, 1981). The essays were evaluated on a 12-point scale for each of the following five categories: Grammar, Vocabulary, Content and Topic Development, Organization and Rhetorical features, and Appeal to the Readers. The highest possible score

on each item was 12 points; thus, the total number of points for each essay comprises the sum of all points in the five categories with a maximum of 60 points. Table 6-3 comprises the average scores in each item. There was a high correlation between the two raters (r = .84, p < .001), for which reason the average figures were used.

Table 6-3.

Results of English Essay Evaluation

Group	N	Topic	Evaluation criteria						Total
			rubric	Content and topic development	Organization and rhetorical features	Grammar	Vocab.	Appeal to the readers	(Ave.)
G1	10	Topic 12	*M*	8.05	8.90	8.10	8.75	8.30	42.10 (8.42)
			S.D.	1.69	2.19	1.48	1.34	1.82	
	10	Topic 13	*M*	6.55	8.05	8.25	8.35	7.50	38.70 (7.74)
			S.D.	2.11	2.38	1.79	1.42	1.88	
G2	10	Topic 12	*M*	7.35	7.40	7.00	7.55	7.35	36.55 (7.33)
			S.D.	2.06	2.01	1.45	1.47	1.62	
	10	Topic 13	*M*	7.35	7.70	7.35	7.70	7.45	37.10 (7.51)
			S.D.	1.68	1.90	1.71	1.27	1.53	
L-group	9	Topic 12	*M*	3.50	3.78	5.22	5.00	3.83	21.44 (4.27)
			S.D.	1.38	1.78	1.18	1.20	1.34	
	9	Topic 13	*M*	4.06	4.17	4.72	5.39	4.17	22.44 (4.50)
			S.D.	1.61	1.95	1.76	1.77	1.83	

Note. Unit= average score.

An analysis of variance (ANOVA) on these scores yielded significant variation among the cohorts. A post-hoc BH test (Benjamini & Hochberg, 1995) showed that total scores of L-group was significantly lower than those of G1 and G2 in both topics (Topic 12: p < .001, power = 1, f = 1.39, large; Topic 13: p < .001, power = 0.99, f = .97, large). To be specific, scores in every category are significantly lower in L-group than G-groups (p

< .001 − *p* < .01). G1 had higher scores than G2 in every category; however, the difference in scores of G1 and G2 was not significant except grammar and vocabulary in Topic 12 (*p* < .05). The results of evaluation clearly show that the quality of L-group essays was much lower than the essays written by G-group students. In terms of the quality of essays by topics, the difference between Topics 12 and 13 was not statistically significant in any cohorts. It means that in-class education over a single term does not necessarily lead to significant improvement in the quality of essays statistically.

6.3 Procedure of Analysis

Four people were involved in the analysis of English texts. The first person (the current author), who is a college English instructor, mainly led the analysis. She was trained to teach academic writing in her master's course at Melbourne University, and was teaching writing in English to Japanese college students at the time of this analysis. The second person was a Japanese high school teacher teaching English. She used to be a master student in the graduate school of Foreign Language Education and Research in Kansai University, and became an English teacher at a private high school in Yamaguchi prefecture. She was in the first year at school at the time of this analysis. Although she had a basic knowledge of academic writing, she was not yet fully trained to teach writing in English. The third person was an American male living in Japan for about ten years, and taught at a private university in Kobe for more than five years. He was teaching classes aimed at improving the four skills of English, including English composition. In this class, various types of essays and academic papers were taught; thus, he was quite knowledgeable about how to teach both writing English essays and articles to Japanese students. The fourth person was an American female teaching at a private university in Kyoto for more than five

years. She taught various classes in English grammar, reading, listening, and writing. However, teaching English composition was not necessarily her specialty.

The process of analysis was as follows: SF tags in Table 5-1 and their sequences were first examined, and the rhetorical relations between SF tags were examined with reference to the list of 30 relations (see Appendix 4). It was believed that this analysis would reveal the patterns of rhetorical organization typical to the texts under consideration.

The first three researchers applied SF tags to each sentence, and RST tags between the SF tagged sentences. All the tagging was conducted manually and individually. When disagreement occurred, they consulted each other until an agreement was reached on how the sentences should be tagged. As to the part tagged with NLOG, reasons of anomalies were presented by the third person, and later discussed with the first person, this author, and the second person. Furthermore, the numbers of MDM in each category of the Hyland List (2005) in Table 5-2 were counted for each group of essays by this author. As for Keyword Analysis, two types of keywords, theme-setting keywords (TKs) and argument-setting keywords (AKs), were marked by the first two persons including this author. The numbers of both keywords were counted, and then the keywords that related semantically were connected to examine the coherence of the argument.

For the Japanese essays to be examined in Study 3 (Chapter 9), two Japanese women who were teaching Japanese to JFL learners of Japanese assigned tags. One of them used to be a teacher of Japanese at a public high school for about 30 years, and the other had been teaching Japanese to foreigners at private and national tertiary schools for more than 20 years. Thus, both of them were experienced Japanese instructors. They received full instructions about tagging with lists of the SF tags in Table 5-1 and RST in Japanese (see Appendix 4). Following the procedure conducted for the English essays, the two instructors

manually assigned first the SF tags and then RST tags to the Japanese essays. They tagged the same essays individually. When disagreement occurred, they conferred until an agreement was reached.

The data gained from analyses in the current study was tested statistically, using an online statistic tool called js-star 9.0.4j (Tanaka & Nakano, 2013, 2017).

Note

1. In order to divide G-group data into two subgroups equally, the scores of TOEFL ITP students took before going abroad were referred to. TOEFL ITP 523, which is equivalent to TOEIC 650 (The formula, TOEIC score×0.348+296=TOEFL PBT, was provided by the Educational Testing Service. This formula was being announced at the time of this investigation on the company website in 2013.) was set as the threshold between the advanced and intermediate levels of English proficiency. In KUBEC (ver.2013), there were 84 students (G1) whose TOEFL scores were 523 or above ($M = 546.32$, $SD = 17.92$). The second group (G2) consisted of 76 students with TOEFL scores below 523 ($M = 500.93$, $SD = 17.08$). TOEIC scores for G-group data in Table 6-1 were also calculated by the formula. TOEFL scores of L-class, on the other hand, were calculated from their TOEIC scores.

7. Study 1: Coherence within Paragraphs

7.1 Purpose of Study 1

In Study 1, rhetorical organization of the essays written by G1, G2 and L-groups students are examined with the SF and RST analyses. The features of organization in each of introduction, body, conclusion paragraphs, and the entire essay depending on the cohort were elucidated from the view of whether the essay organization was fit into the prescribed essay format or not. The purpose of these studies is to identify the features of essay organization typical to Japanese EFL college students in relation to their different learner attributes such as L2 proficiency, and L2 writing instruction. The results of Study 1 will be discussed together with the results of Study 2 in **8.5**.

7.2 The Structural-Functional (SF) Analysis

In this section, to examine the features of the structural and functional components of the essays, the numbers of SF tags and their sequences are described for the introductory, body, and concluding paragraphs respectively.

7.2.1 Introductory Paragraph

Figure 7-1 show the proportions of SF tags in the introductory paragraph of both Topics 12 and 13. It is evident that while almost 97-100% of G1 and G2 are composed of INT (introductory statement), THS (thesis statement), and ORG (organizer) (Topic 12: G1 100.0%, G2 97.5%; Topic 13: G1 100.0%, G2 100.0%), the total proportion of these three tags was much lower in L-group (Topic 12: 76.08%; Topic 13: 47.51%). Other than INT, THS, and ORG, SS (supporting sentence) and EX (extender) were found in L-group in a larger proportion (Topic 12: EX 21.69%; Topic 13: SS 2.98%, EX 32.86%). In addition,

"unknown" tags were found in L-group (Topic 12: 2.22%; Topic 13: 11.04%), indicating that there might have been information that was not directly related to the contents required in the introductory paragraph.
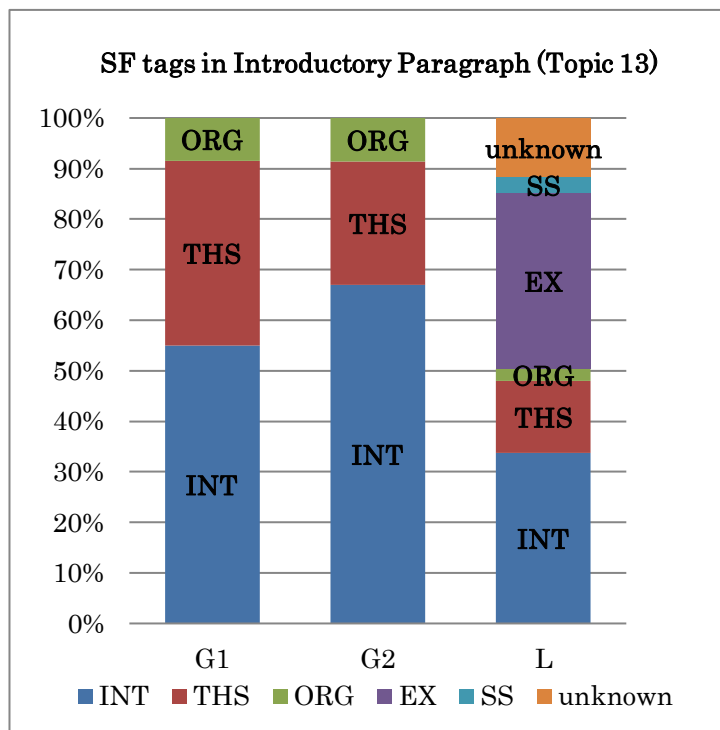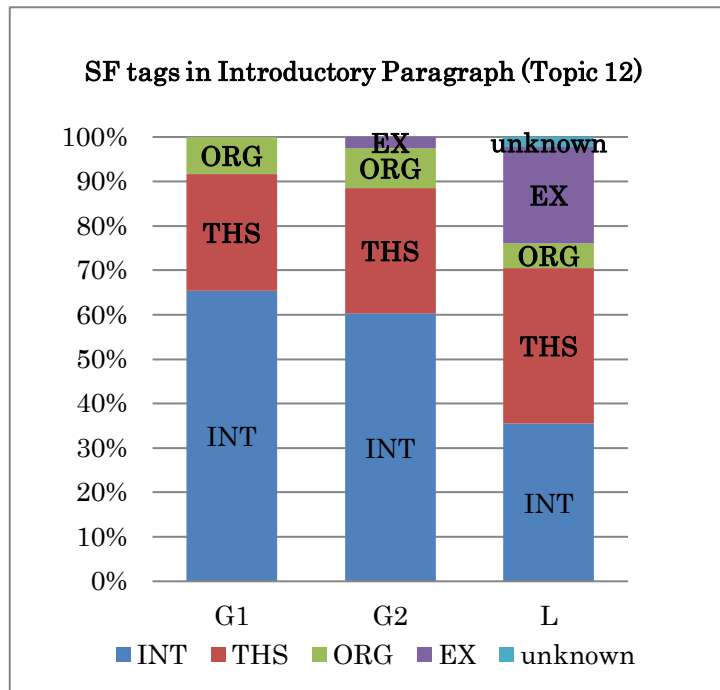
Figure 7-1. SF tags identified in the introductory paragraph.

These results show that the introductory paragraphs of G1/2 appeared to have fixed patterns with INT, THS, and ORG. On the other hand, L-group had more variations among the students than G1/G2.

In sorting SF tags into sequences, some patterns typical to the introductory paragraph can be identified, as shown in Table 7-1. It is also revealed that the proportions of these patterns differed among the three cohorts. The distinctive difference identified in the patterns depended on the presence of THS and/or ORG, and the location of THS.

Table 7-1.

SF Tag Sequences (Patterns) and Their Proportions in the Introductory Paragraph

Pattern[a]	G1	G2	L-group
1 INT^{1-4}- **THS - ORG**	7 (35.0%)	7 (35.0%)	2 (11.1%)
2 INT^{1-4}- **THS (ORG is included)**	9 (45.0%)	8 (40.0%)	1 (5.5%) * ↓
3 INT^{1-4} (-TRS) - **THS**	3 (15.0%)	2 (10.0%)	5 (27.8%)
4 **THS** (- SS^{1-n}/EX/ORG)	1 (5.0%) * ↓[b]	2 (10.0%)	8 (44.4%) **↑
5 (TS) - INT^{1-4}	0	1 (5.0%)	2 (11.1%)
Total	20 (100%)	20 (100%)	18 (100%)

Note. [a]The numbers in superscript show the number of tags. For example, INT^{1-4} means that INT appears 1 to 4 times. *N* shows that it appears more than four times (e.g., INT^{1-n}); [b]Residuals were calculated with Fisher's exact test after Chi-square test was conducted to examine which pattern is significantly overused or underused, compared to other cohorts (** $p < .01$ * $p < .05$); An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row. Residual analysis with adjusted *p* value (Benjamini & Hochberg, 1995) was conducted.

In the prescribed method of essay organization, THS, a requisite element, must be included in the first paragraph; on the other hand, ORG, an optional element, is not always necessary. However, Patterns 1 and 2 are more frequent in both G1 (Pattern 1: 35.0%, Pattern 2: 45.0% respectively) and G2 (35.0% and 40.0% respectively) than L-group. Regarding Pattern 2, L-group is significantly lower in the number of frequency ($\chi^2(8) = 21.26$, $p = .0034$, *power* $= 0.93$, $w = 0.61$, large[1]). These results indicate that ORG is considered to be a required element in G-groups' texts. L-group, on the other hand, have patterns that differ from those of G1 and G2. In L-group, 44.4% belong to Pattern 4 where THS is at the beginning of the paragraph ($p < .01$), which means that the writers first state their positions in the introductory paragraph.

7.2.2 Body Paragraph

Figure 7-2 shows the proportions of SF tags in each cohort. Almost 90% of the essays written by G-groups comprised TS (topic sentence), SS (supporting sentence), and EX (extender) in both topics (Total of three tags: Topic 12: G1 88.34%, G2 89.03%; Topic 13: G1 91.20%, G2 91.98%). In L-group, the total proportions of these tags were slightly lower but were almost the same as those of the other two cohorts (Topic 12: 79.32%; Topic 13 87.87%). The major difference, however, was that the proportion of SS in L-group was much lower (Topic 12: G1 27.83%, G2 22.55, L-group 7.52%; Topic 13: G1 19.77%, G2 11.98%, L 3.23%), while EX was higher (Topic 12: 49.07%; Topic 13: 72.95%) than G1 and G2 (Topic 12: G1 40.95%, G2 49.21%; Topic 13: G1 51.98%, G2 59.47%). In addition, similar to the introductory paragraph, "unknown" tags were identified in greater proportions in L-group (Topic 12: G1 0%, G2 1.11%, L 18.46%; Topic 13: G1 2.01%, G2 0.83%, L 9.96%) than in G1 and G2. CS (concluding sentence) was found in every group;

however, the proportions were slightly larger in G1 and G2 than in L-group in Topic 12 (G1 11.16%, G2 9.86%, L 0.89%) and Topic 13 (G1 5.59%, G2 6.27%, L 2.17%).
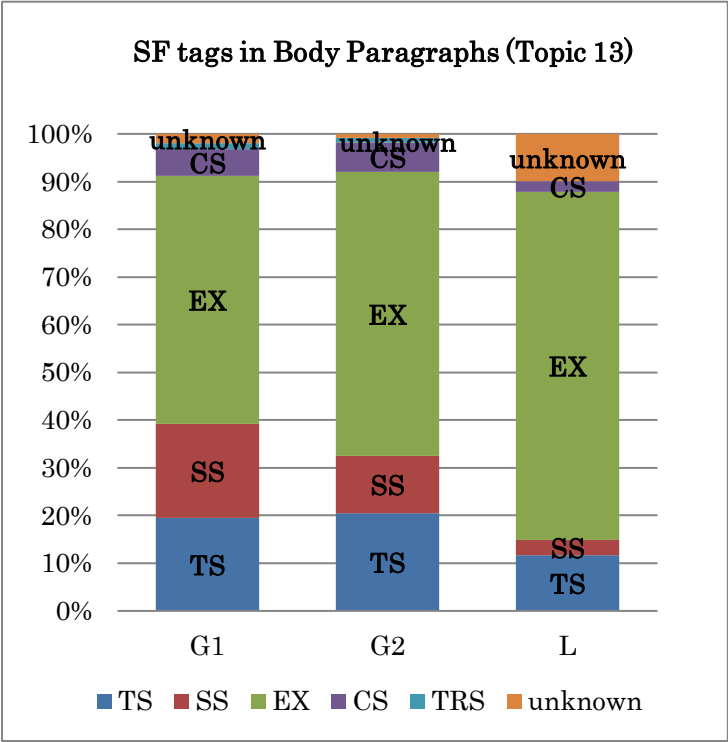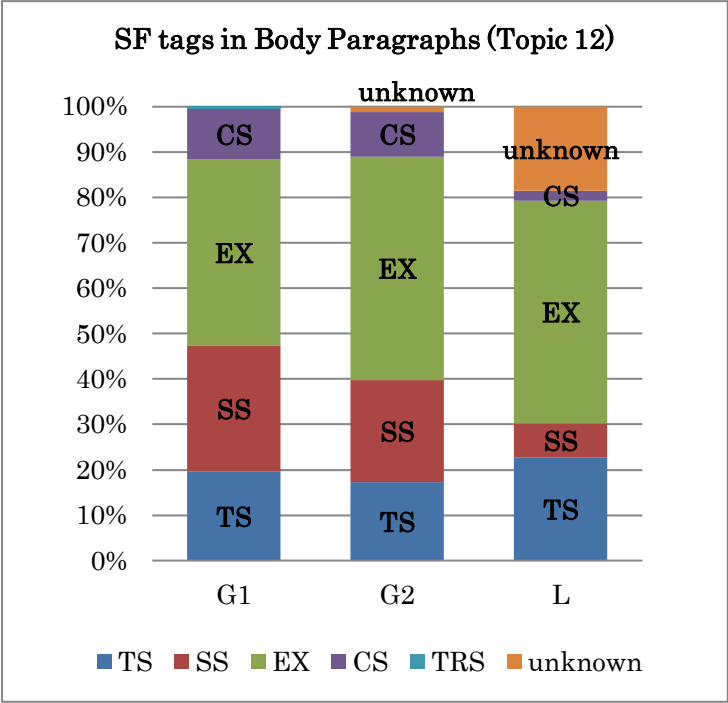
Figure 7-2. SF tags identified in the body paragraph.

As for the tag sequence, seven patterns were identified in the body paragraphs consisting of paragraphs from the second paragraph to the fifth paragraph. Table 7-2 shows the frequencies and proportions of the patterns to which each group belongs, while Table 7-3 has the frequencies and proportions of the three major patterns.

Table 7-2.

SF Tag Sequences (Patterns) and Their Frequencies and Proportions in the Body Paragraphs

	Pattern	G1	G2	L-group
1	**TS**-EX^{1-n}	4 (7.40%) *$^{\downarrow}$	10 (20.83%)	11 (35.48%) *$^{\uparrow}$
2	**TS** (-EX)-SS (-EX^{1-n})	17 (31.48%)	11 (22.91%)	4 (12.90%)
3	**TS** (-EX)-SS^1 (-EX$^{1-2}$)-SS^2 (-EX$^{1-2}$)	6 (11.11%)	2 (4.16%)	1 (3.23%)
4	**TS** (-EX^{1-n})-**CS**	1 (1.85%)	4 (8.33%)	3 (9.68%)
5	**TS** (-EX)-SS (-EX$^{1-3}$)-**CS**	12 (22.22%)	11 (22.91%)	0 (0%) *$^{\downarrow}$
6	**TS** (-EX)-SS^1 (-EX$^{1-3}$)-SS^{2-n} (EX^{1-n})-**CS**	13 (24.07%) *$^{\uparrow}$	6 (12.50%)	2 (6.45%)
7	Others (SS^{1-n}/EX^{1-n}<**TS**(<SS^{2-n}/EX^{2-n}) /**TS** only or no **TS**)	1(1.85%) *$^{\downarrow}$	4 (8.33%)	10 (32.25%) ***$^{\uparrow}$
	Total	54 (100%)	48 (100%)	31 (100%)

Note. *** $p< .001$ ** $p< .01$ * $p< .05$; An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row.

Table 7-3.

SF Sequences (Patterns) and Their Frequencies and Proportions in the Body Paragraphs

Pattern	G1	G2	L-group
Patterns 1-3	27 (50.0%)	23 (47.91%)	16 (51.61%)
Patterns 4-6	26 (48.12%) *↑	21 (43.75%)	5 (16.12%) **↓
Pattern 7	1 (1.85%) **↓	4 (8.33%)	10 (32.25%) ***↑
Total	54 (100%)	48 (100%)	31 (100%)

Note. *** $p < .001$ ** $p < .01$ * $p < .05$; An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row.

The SF tag sequences or patterns in Tables 7-2 and 7-3 are examined from the viewpoint of whether the paragraph has a TS and/or CS. The TS is an obligatory element while CS is optional. The differences among the three cohorts are evident as shown in Table 7-3 ($\chi^2(4) = 22.36$, $p = .0003$, *power* $= 0.97$, $w = 0.41$, medium). The patterns used by G1 and G2 were almost evenly divided into Patterns 1-3 and 4-6, or the patterns either with or without CS at the end of the paragraph. Since the result of residual analysis showed that Patterns 4-6 for G1 attained statistical significance ($p < .05$), CS was used as an integral element in G1 students. On the other hand, while half of the L-group essays had Pattern 1-3, they statistically less used Patterns 4-6 ($p < .01$), and had a statistically higher proportion of Pattern 7 ($p < .001$). When investigating each group closely in Table 7-2, the most frequently used patterns in G1 were Pattern 2, which does not include CS, or Patterns 5 and 6 ($p < .05$), which include CS ($\chi^2(12) = 44.63$, $p < .001$, *power* $= 0.99$, $w = 0.58$, large). G2 had in an equal number of frequency for both Patterns 2 and 5. Both

patterns feature only one SS after the TS. In the essays written by L-group, Pattern 1 (p < .05), which features paragraphs that do not have supporting sentences, and Pattern 7 (p < .001), the paragraph that features EX^{1-n} or SS^{1-n} before the TS, or either the TS only (no SS and/or EX) or no TS at all (only SSs and/or EXs), are statistically significant. These results show the stark difference between G-group and L-group.

7.2.3 Concluding Paragraph

Figure 7-3 shows the features of the final paragraph of the essays in each cohort. The RTHS, or Restatement of Thesis Statement, was found in all groups except L-group in Topic 13 (0%), while G-group possessed a higher proportion of RTHS (restatement of thesis statement) than L-group (Topic 12: G1 40.0%, G2 43.33%, L 17.86%; Topic 13: G1 38.17%, G2 25.67%, L 0%). The final paragraphs of G1/2 were composed of RTHS, SS, EX, and CS or KK. KK or Kicker was evident among G1 and G2, particularly in Topic 12 (G1: 20.83%; G2: 15.83%) compared with L-group (0%). This suggests that G-group students were trying to finish their essays off effectively, by, for example, giving a suggestion or future direction. On the other hand, L-group had greater variation. The proportion of EX was larger (Topic 12: G1 24.17%, G2 25.83%, L 61.21%; Topic 13: G1 17.17%, G2 35.0%, L 44.86%), and the "unknown" tags were also observed in large proportions in L-group (Topic 12: 12.86%; Topic 13: 16.39%, respectively). This suggests that L-group's conclusions did not have a proper ending. As for the "unknown" tag, these were found even in G-group essays (Topic 12: G1 0%, G2 5.0%; Topic 13: G1 5.0%, G2 5.0%). These findings suggest that essay endings are somewhat difficult for Japanese EFL students.

SF tags in Concluding Paragraph (Topic 12)

SF tags in Concluding Paragraph (Topic 13)
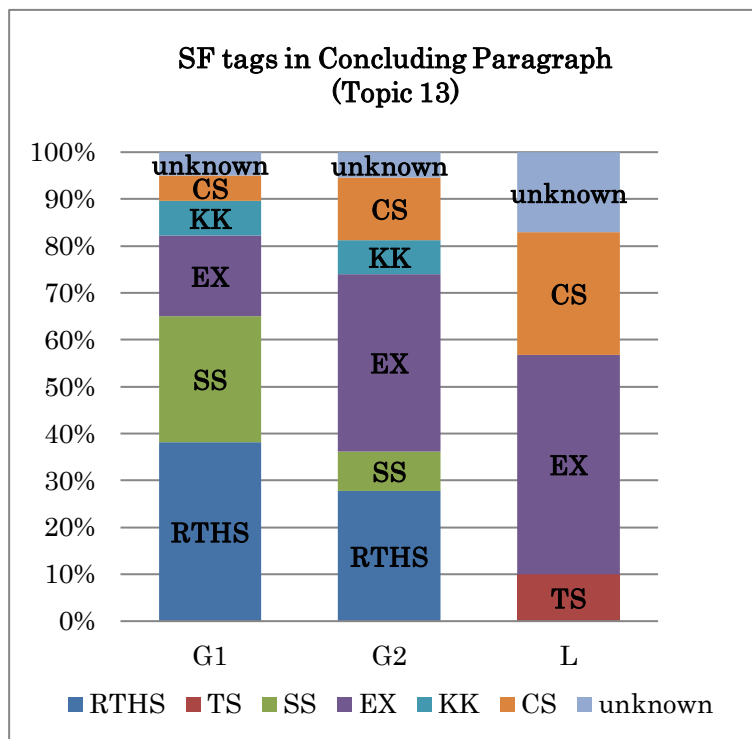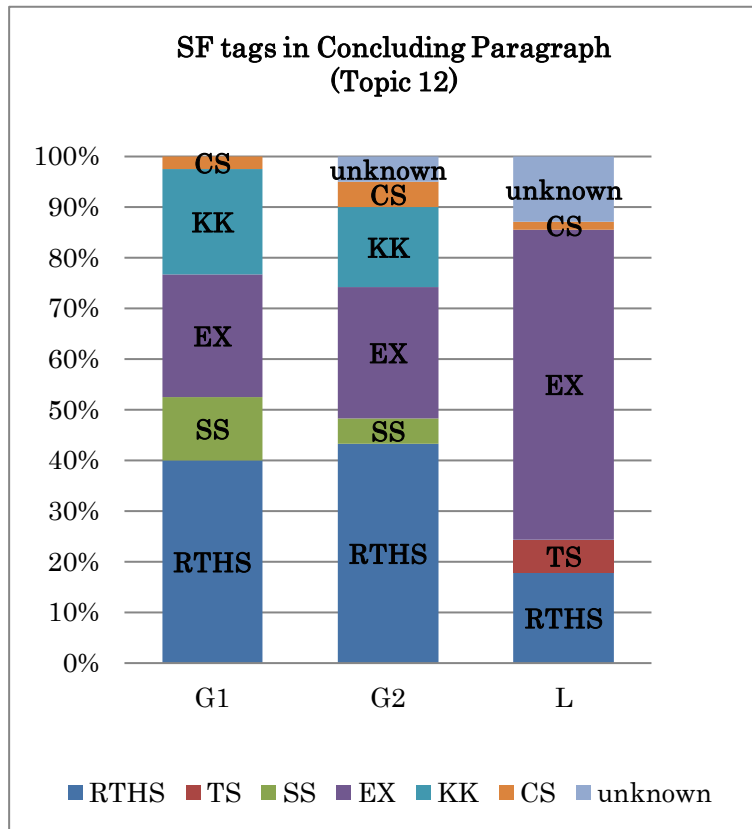
Figure 7-3. SF tags identified in the concluding paragraphs on Topics 12 and 13.

Table 7-4 shows the typical SF tag patterns identified in the concluding paragraph in each cohort ($\chi^2(4) = 19.68$, $p < .001$, *power* $= 0.96$ $w = 0.60$, large). The pattern that appeared most significantly among G1 was Pattern 2, which contains RTHS at the beginning of the paragraph, followed by several SSs ($p < .05$). G2 had Pattern 1 with RTHS, followed by just one SS ($p < .05$). In case of L-group, six essays were unfinished, and those who finished writing the essay constituted Pattern 3, which has no RTHS but instead a TS, or no TS at all ($p < .01$). There was a difference between any groups, G1, G2 and L, statistically showing that students in each group had different ending in their essays.

Table 7-4.

SF Tag Sequences (Patterns) and Their Proportions in the Concluding Paragraph

	Pattern	G1	G2	L-group
1	**RTHS** - SS<EX$^{(1-n)}$- CS/KK	8 (40.0%)	13 (65.0%) *$^{\uparrow}$	3 (21.42%) *$^{\downarrow}$
2	**RTHS** - SS^{1-n} - EX/CS/KK	12 (60.0%) *$^{\uparrow}$	4 (20.0%) *$^{\downarrow}$	4 (28.57%)
3	**TS** (- SS/EX^{1-n}/CS) or others (no RTHS/TS)	0*$^{\downarrow}$	3 (15.0%)	7 (50.0%) **$^{\uparrow}$
	Total	20 (100%)	20 (100%)	14 (100%)

Note. ** $p < .01$ * $p < .05$; An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row.

In this section, the SF Analysis has identified several specific features of functional elements and their sequences in the introductory, body, and concluding paragraphs. The different patterns of organization have already been identified according

to their proficiency levels. In particular, the difference between G-group and L-group was evident. In G-group essays, the logical alignments of SF components were already detected, suggesting that their essays were logically linear. On the other hand, many of the L-group essays tended to lack necessary components such as SSs after TS in body paragraphs. More discussion regarding the essay contents from the viewpoints of their logical cohesion, or lack thereof, will be provided in Chapter 9.

7.3 Rhetorical Structure Theory (RST) Analysis

In this section, the results of the RST analysis are demonstrated, together with the results of the SF analysis. Now that the SF components and their sequences characteristic to the target essays have been presented, semantic relations between the SF components are elucidated. Representative samples, which show semantic relations typical of SF patterns, were selected from amongst the students' essays by the author and the third researcher, an American male instructor. All the surface errors, including grammatical errors and awkward expressions in the texts, remained unchanged.

7.3.1 Introductory Paragraph

Table 7-5 shows the top five rhetorical relations (RST relations) identified between SF tags in the introductory paragraph (both for Topics 12 and 13). Although the order of frequency differs, G1 and G2 shared similar distributions of RST relations, which include *background, contrast, organization, elaboration*, and *interpretation*.

Table 7-5.

Five Most Frequent Rhetorical Relations in the Introductory Paragraph

G1			G2			L-group		
Relations	No.	%	Relations	No.	%	Relations	No.	%
background	21	25.93	background	25	31.25	NLOG	23	22.23
contrast	9	11.11	contrast	8	10	elaboration	10	10.10
reason	8	9.88	organization	6	7.5	interpretation	9	9.09
organization	7	8.64	interpretation	5	6.25	result	7	7.07
elaboration	6	7.40	elaboration	5	6.25	problem	6	6.06
Sub-total	51	62.96		49	61.25		55	55.55
Total	81	100	Total	80	100	Total	99	100

As discussed in the previous section, the patterns of SF tag sequence in the introductory paragraph most frequently used by G1 and G2 were Patterns 1 (INT$^{1-4}$-THS-ORG) and 2 (INT$^{1-4}$-THS [ORG included]) (see Table 7-1). With both patterns, students started the introductory paragraph with several INTs, followed by a THS (and ORG) at the end of the paragraph (see Figures 7-4 for Pattern 1 and 7-5 for Pattern 2). The rhetorical relations between INTs and the THS were mainly *background* (G1: 25.93%; G2: 31.25% in Table 7-5), or background information related to the thesis statement. Two *contrast* ideas or opinions about a given statement were often present, as in the sample in Figures 7-4 and 7-5. The former example has two contrasted opinions about a total ban on smoking, as described in INT^2 and INT^3. Such phrases as "some people say that…" and "others believe that…," underlined by this author in Figure 7-4, were used to introduce two contrasting ideas. Once these ideas were given, the student stated his position in favor of a total ban on smoking, starting with "I personally believe

that…" (see the 5th line of the text in Figure 7-4) in the sample text. Frequent phrases in

the sentences tagged as ORG, "In this essay," (see the 6th line) or "This essay" (see the

6th line of the text in Figure 7-5) were also used to lead the writer's opinion, often

backed by the reason with "because." With these MDMs, the introductory paragraphs

written by G1 and G2 are logically well-constructed. The details of MDMs, however,

will be described in **8.2**.

RST Diagram	
Text	<INT[1]: **background to THS**> Smoking is a controversial problem in the world. <INT[2]: **background to THS**> <u>Some people say that</u> smoking should be banned at all the restaurants completely. <INT[3]: **contrast to INT[2]**> <u>Others believe that</u> smokers' rights should be respected. <THS: **thesis statement**> <u>I personally believe that</u> all the restaurants should ban smoking. <ORG: **organization to THS**> <u>In this essay</u>, I would like to explain the reasons by focusing on bad impacts of smoking.

Figure 7-4. An example of RST relations in an introductory paragraph typical of SF

pattern 1 (G1-6, Topic 13). Sentences were underlined by this author.

The sample introduction in Figure 7-5 also contains two opposite opinions about

part-time jobs as *background* information from INT[1] to INT[3]. The fact that many

students are working part-time in INT[1] is contrasted with the opponents' opinion that

students should concentrate on studying in INT[2] because "working hard for a part time

job could make the students neglect studying." The linking adverb "however" is often

used for the *contrast* relation. Although ORG is not compulsory, it plays an important

role in directing the course of argumentation throughout an entire essay. This matches the fact that *organization* is among the five top semantic relations in G1/2, as shown in Table 7-5. As seen in the sample paragraphs, the most popular RST pattern in introductory paragraphs is *background (linked with THS), - contrast (to the previous background information) -* (THS) – *organization* (ORG).

RST Diagram	INT^1- INT^2 - INT^3 - **THS (incl ORG)** CNTR INTP BGRD
Text	<**INT^1: background to THS**> It might be true that most college student have a part-time job. <**INT^2: contrast to INT^1**> However, there are some opinion that working hard for a part time job could make the students neglect studying. <**INT^3: interpretation to INT^2**> Part time jobs can bring positive changes to the students. <**THS: thesis statement**> This essay will describe my positive opinion to part time jobs; **(ORG: organization to THS)** in terms of value of money, experience of work and ability to plan.

Figure 7-5. An example of RST relations in an introductory paragraph typical of SF pattern 2 (G1-8, Topic 12).

On the other hand, the most frequent SF pattern identified in the opening paragraph of the essays written by L-group students is Pattern 4 (THS[-SS$^{1-4}$/EX/ORG]) in which the THS is located at the beginning of the paragraph, followed by either SS, EX, or ORG (see Table 7-1). L-group essays had *elaboration, interpretation, result*, and *problem,* and this list of rhetorical relations in Table 7-5 differs slightly from those of G1and G2. These RST relations indicate that their introductory paragraphs already contained explanations or discussion of the writer's opinion.

In the example given in Figure 7-6, it can be concluded from the RST diagram that the paragraph contains a detailed discussion. The writer's position against smoking in the THS is supported by a detailed account of the negative impact of smoking on one's health from SS to EX^6. Discussions such as this one, however, could have been made in the body paragraphs.

RST Diagram	**THS - SS - EX^1 - EX^2 - EX^3 - EX^4 - EX^5 - EX^6** RSON NLOG RSLT PRBL SLTN PRBL RSLT
Text	<**THS**> I'm in the position that smoking be completely banned at all the public places. **<SS: reason to THS>** Smoking only give human's body bad effect such as lung cancer. **<EX^1: NLOG to SS>** Nicotine, the material which is contained in tobacco, is more toxic than heroin. **<EX^2: result to EX^1>** People who smoke tobacco on daily basis have a tendency fell into nicotine dependence syndrome without their conscious. **<EX^3: problem to EX^2>** It is a kind of mental disorder and you cannot stop smoking with your own will. **<EX^4: solution to EX^3>** You have to go hospital and take a medical attention immediately. **<EX^5: problem to EX^4>** You would need a lot of money to buy a lot of medicine or to take consultation. **<EX^6: result/effect to EX^5>** And you would charge heavy burden on your whole family.

Figure 7-6. An example of an introductory paragraph written by an L-group student (L-4, Topic 13).

When the THS is stated at the beginning of the first paragraph, the essays tend to become disproportionately long, and deviate from the main idea, or a shift of topic occurs in between. In fact, the introductory paragraph in Figure 7-6 contains irrelevant information tagged as "NLOG" in EX^1, which is not directly related to the SS. The higher proportions of both "unknown" SF tags and "NLOG" tags found in L-group

introductory paragraphs could be related to logical anomalies, which will be discussed in Chapter 9.

In this section, introductory paragraphs written by the three cohorts have been examined. In an argumentative essay, the role of an introductory paragraph is to provide background information on the essay topic. A thesis statement is often written at the end of the paragraph, followed by the organizer to show how the essay is organized. In this regard, the introductory paragraphs written by G1 and G2 were considered to observe the ideal patterns of structure and organization, as they included the THS and ORG. On the other hand, L-group essays often started with a thesis statement and then tended to collapse logically, with too much information with EXs inserted in the middle of the paragraph.

7.3.2 Body Paragraphs

Table 7-6 comprises the list of RST relations identified in the body paragraphs, or the second to fifth paragraphs, for each of the three cohorts. G1 and G2 were strongly similar regarding the distribution of RST relations. The five most frequent RST relations for G1 and G2 included *elaboration* (G1: 17.74%, G2: 19.22%)*, reason* (G1: 16.45%, G2: 14.12%)*, result* (G1: 10.65, G2: 10.59%)*, interpretation* (G1: 7.74%, G2: 6.67%), and *example* (G1: 6.77%, G2: 6.67%). The body paragraphs of an argumentative essay require explanations to support the writer's position. In this sense, the *elaboration, reason, interpretation (writer's opinion)*, and *example* identified among G1 and G2 indicate that their body paragraphs carried the expected contents. Even in L-group, the same relations as G1 and G2, that is, *elaboration* (17.79%)*, reason* (10.43%)*, example* (9.82%)*, and *result* (9.82%), were identified. Other relations found in the list included

addition (G1: 5.16%, G2:5.49%), *problem* (G1: 4.19%, G2: 3.92%, L-group: 3.68%)*,*

contrast (G1: 3.23%, G2: 4.71%, L-group: 4.29%), *solution* (G1: 2.90%, G2: 2.75%),

and *restatement* (G1: 1.94%, G2: 3.14%).

Table 7-6.

List of Rhetorical Relations in the Body Paragraphs

G1			G2			L-group		
Relations	No.	%	Relations	No.	%	Relations	No.	%
elaboration	55	17.74	elaboration	49	19.22	NLOG	43	26.38
reason	51	16.45	reason	36	14.12	elaboration	29	17.79
result	33	10.65	result	27	10.59	reason	17	10.43
interpretation	24	7.74	example	17	6.67	example	16	9.82
example	21	6.77	interpretation	17	6.67	result	16	9.82
conclusion	19	6.13	NLOG	15	5.88	interpretation	12	7.36
addition	16	5.16	addition	14	5.49	contrast	7	4.29
problem	13	4.19	contrast	12	4.71	problem	6	3.68
contrast	10	3.23	problem	10	3.92	--	--	--
justification	9	2.90	restatement	8	3.14	--	--	--
solution	9	2.90	solution	7	2.75	--	--	--
condition	8	2.58	antithesis	6	2.35	--	--	--
restatement	6	1.94	justification	5	1.96	--	--	--
consequence	6	1.94	conclusion	2	0.78	--	--	--
NLOG	5	1.61	--	--	--	--	--	--
Sub-total	285	91.94		225	88.24		146	89.57
Total	310	100	Total	255	100	Total	163	100

Conclusion was frequently found in G1 (6.13%). Unlike the introductory paragraph, the *NLOG* were identified even in G1 (1.61%) and G2 (5.88%); however, L-group carried the highest proportion of *NLOG*, at 26.38%. The SF tag analysis (see Figure 7-2) found that almost 90% of the body paragraphs written by G1 and G2 comprised TS, SS, and EX in both Topics 12 and 13, and the most frequent SF sequences (see Table 7-3) comprised Patterns 1-3, which have TS at the beginning of the paragraphs, and Patterns 4-6, which have CS at the end.

One of the noteworthy findings of RST relations in body paragraphs is that fixed patterns of rhetorical organization typical of these two SF Patterns of 1-3 and 4-6 in Table 7-3 were identified in G-group essays. Figure 7-7 shows the RST relations characteristic of Patterns 1-3 and 4-6. As to Pattern 1-3 in Topic 12 (1 in Figure 7-7), TS constitutes a sub-claim, which often states the *reason* for the main claim; in other words, it is a THS expressing the writer's position in relation to the given topic, that is, part-time jobs. The TS is then followed by SSs and EXs with a detailed *elaboration* or *example* to justify the reason stated in the TS. In Topic 13 (4 in Figure 7-7), the TS presents either the *reason* or *problem* behind the writer's position as stated in the THS. In most cases, the writers supported banning smoking in public places and discussed this in relation to the negative aspects of smoking in each body paragraph. A *problem* related to smoking was often followed by the *result* of the problem, further *elaborations*, or a *solution* to the *problem.*

The other RST relations typical of Pattern 4-6 have a CS, which include the *result, conclusion*, or *restatement* of what the writer has discussed in the paragraph (2, 3, and 5 in Figure 7-7). The rhetorical patterns characteristic of students' essays, especially found in Topic 13 (6 in Figure 7-7), resemble the prototypical rhetorical patterns of the

Problem-Solution pattern proposed by Hoey (1983, 2001). This pattern is characterized by the following elements, namely, the *Situation* that provides a context for the pattern; the *Problem*, which describes aspects of the situation requiring a response; the *Response* to the problem; and *positive/negative Results or Evaluation* (Hoey, 1983). The sample paragraphs are presented in the following sections **a** to **c** in order to describe these patterns in more detail.

SF Patterns	Topic 12: Part-time job	Topic 13: Smoking
Patterns 1-3	1. TS - SS-EX^1-EX^2 (RSON) ELBR/ EXMP	4.TS - SS^1 - SS^2 - EX (RSON RSLT RSLT ELBR/SLTN /PRBL)
Patterns 4-6	2. **TS - SS^1- SS^2-EX^1-EX^2-EX^3-CS** ELBR RSLT EXMP **(RSON)** 3. **TS - SS^1-EX-SS^2-EX- SS^3- EX- CS** ELBR CNTR INTP RSLT **(RSON)**	5.TS -SS^1-SS^2-EX-SS^3-CS (RSON RSLT CNCL/RTRN /PRBL) 6. TS - SS^1 - SS^2- EX^1-EX^2- CS (RSON RSLT RSLT ELBR SLTN / PRBL)

Figure 7-7. Representative sample patterns of rhetorical sequences identified in the body paragraphs of Topics 12 and 13. The double underlining means that the same rhetorical relations are applied to the relations between the SF tags.

Note. CNCL = conclusion, CNTR = contrast, ELBR = elaboration, EXMP = example, INTP = interpretation, PRBL = problem, RSLT = result/effect, RSON = reason, RTRN = restatement, SLTN = solution

a. G1 and G2: RST Relations Typical of SF Patterns 1-3

[*reason – elaboration/example*]

In the sample text quoted in Figure 7-8, the TS comprises a *reason* to support the writer's position of having a part-time job. Her main idea is that having a part-time job is positive since the experience could connect her to the society. The TS is supported by her own experience written in SS to EX³ as an *example*, starting with "In my experience,…" (see 3rd line in Figure 7-8). The sequencing markers such as "first(ly)," "first of all," "second(ly)," and "finally," as found in Figures 7-8 to 7-11 are overused in G-group, showing the writers describe, one by one, the reasons why they agree (or disagree) to the given topics.

RST Diagram	**TS** — SS - EX¹ - EX² - EX³ **EXMP ELBR RSLT INTP** **EXMP** **RSON** (to THS)
Text	<TS: reason to THS> <u>Second</u>, they can relate to the society before they graduate from school. **<SS: example to TS>** <u>In my experience,</u> when I started the part time job at restaurant, I could feel that I am the member of the society. **<EX¹: elaboration to SS>** I make money from customer by giving service. **<EX²: result from EX¹>** Despite I was just given service before that, I make someone feel happy. **<EX³: interpretation to EX²>** That was a fantastic experience for me.

Figure 7-8. An example of RST relations in a body paragraph typical of SF patterns 1-3 (G2-8, Topic 12: P3).

Another example text in Figure 7-9 also presents a positive attitude to having a part-time job. SS shows the *elaboration* of the TS regarding the feelings of students who are financially supported by their parents about the money gained from a part-time job. This is followed by an *example* of those who stopped wasting money after their experience of having a part-time job.
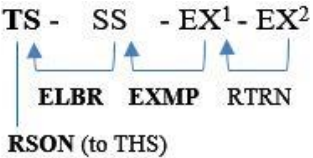
RST Diagram	TS - SS - EX¹- EX² (ELBR EXMP RTRN) RSON (to THS)
Text	**<TS: reason to THS>** <u>First</u>, many college students had never had a part time job, and their parents have paid money for the college and their cost of living. **<SS: elaboration to TS>** When such students earn money themselves, they could recognize how hard it is to earn and how valuable money is. **<EX¹: example to SS>** Actually, (when) some students who had started their part time jobs, they found the importance of money and stopped spending large amount of money. **<EX²: reiteration to EX¹>** It means that to have a part time job can make students feel that it is not easy to earn money.

Figure 7-9. An example of RST relations in a body paragraph typical of SF patterns 1-3 (G1-8, Topic 12: P2).

[*problem/reason – result/elaboration/ solution*]

Figures 7-10 to 7-11 are typical cases of *problem-solution* relations in Topic 13. In Figure 7-10, the writer describes a *problem* in which there is a limitation of separation for smoking and non-smoking areas in SS^1, providing a *solution* to the total-ban on smoking in SS^2.

In Figure 7-11, the writer claims in SS-EX^1 that although there are separated areas for smokers and non-smokers in the restaurants, those areas are not completely satisfactory for non-smokers. Since non-smokers cannot stand the smell of smoke in

restaurants, which is a *problem* stated in EX^1, this writer argues that banning smoking should be recommended, which is a *solution* in EX^2.

RST Diagram	**TS** - SS^1 - SS^2 RSON SLTN **PRBL** (to THS)
Text	**\<TS: problem>** <u>Secondly</u>, all restaurants cannot provide spaces only for smoking persons. **\<SS¹: reason to TS>** Because the rules for smoking areas are not defined, many small restaurants do not have non-smoking areas or other some of them just separate the smoking areas or non-smoking areas. **\<SS²: solution to TS and SS¹>** Therefore, if we can decide smoking should be completely banned, we do not need to discuss about the management of such restaurants.

Figure 7-10. An example of RST relations in a body paragraph typical of SF patterns 1-3 (G2-3, Topic 13: P3).

RST Diagram	**TS** - **SS** - EX^1 - EX^2 ELBR **PRBL** SLTN **RSON** (to THS)
Text	**\<TS: reason to THS>** <u>Finally</u>, the number of customers who are non-smokers will decrease hugely. **\<SS: elaboration to TS>** In many restaurants, there is a smoking area and a non-smoking area for both types of customers. **\<EX¹: problem to SS>** However, in most cases, smokers are able to bear a few minutes not smoking when eating, but most non-smokers really cannot bear the smell of the smoke which makes them go to another restaurant if the non-smoking area of that restaurant was currently full. **\<EX²: solution to EX¹>** By banning smoking at restaurants and getting rid of the smoking booths, more customers would be able to eat at restaurants and will eventually become a profit for the restaurant itself.

Figure 7-11. An example of RST relations in a body paragraph typical of SF patterns 1-3 (G1-6, Topic 13: P2).

Figure 7-12 has a more complex *problem-solution* pattern embedded in a paragraph. It contains a *solution* for smoking in a restaurant. The writer supports smokers' rights, and their smoking in the restaurant. In order to help clarify his position, this writer restates his supporting claim written in the first EX^1 and EX^2. Then, since he knows the negative effects of second-hand smoking, a *solution* is provided from SS^2 to the second EX^2 with an *example* of offering separate areas for smokers and non-smokers.

RST Diagram	
Text	**\<TS: antihesis to THS\>** I agree to allow smokers smoke at restaurants. **\<SS¹: reason to TS\>** That is because they have the right to smoke. **\<EX¹: interpretation to SS¹\>** I would not say they can smoke anywhere they want. **\<EX²: interpretation to SS¹\>**I think that completely stopping them from smoking is not equal. **\<SS²: solution to TS\>** Separating the seats of non-smokers from smokers is one good way to respect the smokers' right and also to protect non-smokers' health. **\<EX¹: example to SS²\>**For example, at Gusto, which is a family restaurant, the smoking area is separated. **\<EX²: elaboration to EX¹\>** Non-smokers do not feel uncomfortable because the smoke cannot reach them.

Figure 7-12. An example of RST relations in a body paragraph typical of SF patterns 1-3 (G1-2, Topic 13: P3).

b. G1 and G2: RST Relations Typical of SF Patterns 4-6

[*reason /problem – (CS)result/restatement/conclusion*]

SF Patterns 4-6, which include CS at the end of the paragraph, are frequent. In particular, Pattern 5 [TS (-EX)-SS (-EX$^{1-3}$)-CS] and Pattern 6 [TS (-EX)-SS^1 (-EX$^{1-3}$)-SS^{2-n} (EX^{1-n})-CS] (see Table 7-2) are prevalent among G1 and G2. CS is often used as the

result of discussion, to *conclude* the discussion, or to *restate* the TS. Table 7-6 shows

that the *result* relation is found in every cohort (G1: 10.65%; G2: 10.59%; L-group:

9.82%). *Restatement* is also found among G1and G2 (G1: 1.94%; G2: 3.14%). On the

other hand, *conclusion* is mainly found in G1 (6.13%), indicating that G1 often uses a CS

to conclude their discussion or to provide a final statement in Pattern 5, and Patten 6,

which is statistically the most frequent among the seven patterns used by G1. First, CS as

a *result* relation are investigated. In the example given in Figure 7-13, the first sentence

as TS provides a *reason* for the THS. From EX[1] to EX[3], the writer states that one of the

benefits of having a part-time job is that students can improve their communication skills

by working in all walks of life, in comparison to the college context where students

largely talk only with their peers of similar age (*contrast* relation between SS and EX[1]).

RST Diagram	
Text	<TS: reason to THS> The first point is *communication skills*. <SS: elaboration to TS> College students can talk with other generations if they have a part time job. <EX[1]: contrast to SS> In the fact, when they are in a college, they talk with only their friends or seniors who are just one or two years older than them. <EX[2]: example to SS> However, for example, students can talk with children and bosses as a teacher at a cram school, and learn how they teach for children for more comprehensions. <EX[3]: example to SS> If they sell something, they think how to explain goods to sell. <CS: result from EX[2-3]/restatement to TS> These examples (should be changed to "this example") are all related with *communication skills*: how they make people understood or convinced.

Figure 7-13. An example of RST relations in a body paragraph typical of SF patterns 4-6

(G2-10, Topic 12: P2).

The CS sentence starts with "these examples" to show that what follows is a *result* of EX^2 to EX^3. At the same time, CS is a *restatement* of what is described in the TS. The key phrase "communication skills" in the TS is repeated in the CS, creating strong coherence within the paragraph. In fact, the *contrast* relation is frequently used to help make an argument more persuasive by examining the two contrasting situations in G-group essays.

Secondly, as a *conclusion* or *restatement* relation in CS, the sample text of Figure 7-14 discusses the merit of having a wide variety of relationships with other people through having a part-time job.

RST Diagram	
Text	<TS: reason to THS> Finally, college students should have a part time job because they can *have various relationships*. <SS^1: elaboration to TS> Usually students have a lot of friends in their college or around their hometown, and their friends are often almost same age as them. <EX: interpretation to SS^1> Of course it is good thing for college students to have many friends who are same generation as them; <SS^2: contrast to SS^1> however, they can meet a lot of people who are very older than them through a part time job. <EX^1: result from SS^2> There are many things that students can learn from older people because they experienced much more than young people, and it is good thing to work together with them. <EX^2: addition to EX^1> Moreover, students might have opportunities to meet important people of companies, [and] it motivates students to make efforts and study. <CS: conclusion from SS^1-EX^2/ restatement to TS> *Having various relationships* is great thing for students.

Figure 7-14. An example of RST relations in a body paragraph typical of SF patterns 4-6 (G1-3, Topic 12: P4)

The final sentence "Having various relationship is a great thing for students," which is tagged as CS, can function as both the *conclusion* of this paragraph and the *restatement* of the TS, connecting the TS and CS with the same keywords as "(have/having) various relationships." This text also has a *contrast* relation. The people you meet in the two contrasted situations, college (SS^1-EX) and workplace (SS^2-EX^{1-2}), are discussed to strengthen the proponent's claim in support of a part-time job. These two positions are shown within box in Figure 7-14 to *elaborate* the TS.

Another sample with Topic 13 (Figure 7-15) suggests the compromise of "separation for smokers and non-smokers" as a *solution* to the negative aspects of smoking in restaurants outlined in the TS. This idea is supported by an *example* (EX^1) of a customer at a restaurant being asked if they would like a smoking or non-smoking seat.

RST Diagram	TRS - **TS** - SS - EX^1 - EX^2 - **CS**
	ELBR RSLT EXMP RSLT **CNCL**
	SLTN RTRN (to TS)
Text	**\<TRS: solution to SS in P2\>**Despite that fact, once more settings which are satisfactory for both smokers and non-smokers are established, smoking can be accepted partly at public places. **\<TS: elaboration to TRS\>**One of the strategies is what is called 'separation for smokers and non-smokers'. **\<SS: result/effect from TS\>**These days, more and more restaurants have been introducing that system. **\<EX^1: example to SS\>**When we enter them in Japan, their staff members often ask, 'Which table would you like to sit, smokers' one or non-smokers' one?' **\<EX^2: result from EX^1\>**So, you can gain two choices, which satisfies both demands. **\<CS: conclusion to EX^2/ restatement to TS\>** All of the restaurants in Japan should set up the system to validate both rights.

Figure 7-15. An example of RST relations in a body paragraph typical of SF patterns 4-6 (G1-10, Topic 13: P2).

The final sentence (CS) of the writer's claim for establishing a system of separate sections then functions as both a *conclusion* to the sentence immediately before (EX^2) and a *restatement* of the TS. Since the frequency of *conclusion* and *restatement* altogether is higher in G1 (N=25, 8.9%) than G2 (N=10, 4.1%) and L-group (N=0), it is obvious that G1 students most frequently use SF Patterns 4-6.

c. RST Relations Typical of Body Paragraphs in L-group Essays

Lastly, the feature of body paragraphs written by L-group students are discussed. The most common SF pattern among L-group students was Pattern 1 [TS-EX^{1-n}], where TSs are not followed by SSs, and EXs come directly after the TS (see Table 7-2). This indicates that the TS plays the role of an SS, directly supporting the THS presented in the opening paragraph. In the example given in Figure 7-16, the writer is trying to say that working part-time while in college is beneficial because it gives students the opportunity to tackle problems that they have never previously experienced.
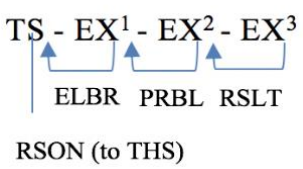
RST Diagram	TS - EX^1 - EX^2 - EX^3 ELBR PRBL RSLT RSON (to THS)
Text	**\<TS: reason for THS\>** Part time jobs give them experience but not limited to money. **\<EX^1: elaboration of TS\>** While we work, a lot of troubles we've never imaged. **\<EX^2: problem of EX^1\>** Those makes us confuse and nervous. **\<EX^3: result of EX^2\>** We are panicked at the situation at first, but we get used to deal with complicated problems and gain confidence gradually.

Figure 7-16. An example of RST relations typical of L-group students (L-3, Topic 12: P2).

The TS provides a *reason* for his position of supporting part-time jobs (THS); however, no SS are provided but EX[1-3] describe the details of the "experience," or "a lot of troubles," gained from part-time jobs. Without SS, what is discussed under the claim stated in TS is unclear. The supporting sentence could be that *students are able to gain confidence through the experience of part-time job*; then, it was followed by the example.

In most cases, some beginning sentences are not related to the main claim as shown in the sample provided in Figure 7-17. In this text, the main idea or TS of the second paragraph could be the fifth sentence where the writer points out one positive aspect of having a part-time job. However, the first four sentences do not directly support this TS in any logical manner, and therefore it is difficult to assign both SF and RST tags.[2] L-group essays had larger proportions of *unknown* tags, used where a particular SF tag could not be assigned (Topic 12 18.46%; Topic 13 9.96% in Figure 7-2), and NLOG tags (26.38% in Table 7-6) than the other cohort.

RST Diagram	**P1** **THS** - EX[1] - EX[2] **P2** ?-?-?-? - **TS** - TRS NLOG NLOG (to THS)
Text	**P1** **\<THS\>** I believe that college students be encouraged to have a part time job. **\<EX[1]\>** Therefore if you are college students and you can afford to work part-time, I would like you to work part-time. **\<EX[2]\>** The experience of work which before get out into the world as a member of society is very importance for students.
	P2 **\<? : NLOG\>** The college students may be above the age of 19. **\<? : NLOG \>** You may have friends who already work as a member of society. **\<? : NLOG \>** And college students may have can afford to work part-time. **\<? : NLOG \>** Then you should earn your money of freely use. **\<TS\>** So If you work part-time, you will be able to earn money. **\<TRS\>** But the good point of working before you become a member of society is not only that.

Figure 7-17. An example of RST relations typical of L-group students (L-2, Topic 12: P1 and P2).

Although further analysis is required, these cases are what the present author called rhetorical anomalies found in the pilot study. The major problem here is there is no ORG component in the first paragraph, which indicates that the writer simply did not know how to begin the second paragraph and thus lost track of the trajectory of his argument.

One more example of Pattern 7 is a paragraph without a TS (Figure 7-18). In the THS[1-2] in the first paragraph, the writer states, "I am against smoking. I am against smoking at a public area." The second paragraph should contain a TS stating why she disagrees with smoking in public places. However, the second paragraph begins with the sentence "Recently, there are many smoking area" tagged as EX[1], which is not directly related to the THS. Due to the lack of a TS, there is a logical break between the first and second paragraphs. The details of these logical breaks will be described in more detail in Chapter 9.

RST Diagram	**P1** INT[1] – THS[1] – THS[2] – ? **P2** EX[1] - EX[2] - EX[3] - EX[4] NLOG NLOG
Text	**P1** < **INT[1]**> A smoker is current Japan is about 30%. < **THS[1]**> I am against smoking. < **THS[2]**> I am against smoking at a public area. **<?>** I see the person who smokes while sometimes walking by the roadside, but you may determine it, and I think that it is a few thing.
	P2 **<EX[1]: NLOG>** Recently, there are many smoking area. **<EX[2]: NLOG>** At the restaurant which I go well, it is divided in a smoking seat and a nonsmoking seat. **<EX[3] >** I think that this is very good. **<EX[4] >** The person who wants to smoke and the person who don't like smoker can eat happily.

Figure 7-18. An example of RST relations typical of L-group students (L-2, Topic 13: P1 and P2).

7.3.3 Concluding Paragraph

The major feature of the concluding paragraph written by G1 and G2 is that the RTHS, or restated thesis statement, is placed at the beginning of the paragraph (Patterns 1 and 2, in Table 7-4). This is reflected in the finding in Table 7-7, in which the *restatement* covers approximately 30% of G1 and G2 (G1: 32.79%; G2: 31.03%). However, as observed in Figure 7-19, the same keywords or phrases as are included in the ORG component in the first paragraph, are used repeatedly.

As found in Figure 7-19, the same sentence tagged with THS "*I strongly agree to the opinion that college students should be encouraged to have a part time job because of the following reasons: sense of money and preparation for being adult*" is repeated in the RTHS. However, instead of a mere repetition, the RTHS could paraphrases the writer's main idea about an alternative suggestion for part-time jobs.

Table 7-7.

List of Rhetorical Relations in the Concluding Paragraph (unit=%)

G1			G2			L-group		
Relations	No.	%	Relations	No.	%	Relations	No.	%
restatement	20	32.79	restatement	18	31.03	NLOG	14	23.73
summary	7	11.48	interpretation	8	13.79	elaboration	10	16.95
addition	7	11.48	NLOG	8	13.79	restatement	8	13.56
solution	6	9.84	conclusion	4	6.90	example	5	8.47
reason	6	9.84	elaboration	4	6.90	result	3	5.08
Sub-total	46	75.41		42	72.41		40	67.80
Total	61	100		58	100		59	100

RST Diagram	RTHS - SS ↑ ⌐ ADTN
Text	(P1) (omitted) **<THS (ORG is included)>**…and I strongly agree to the opinion that college students should be encouraged to have a part time job be following two reasons: sense of money and preparation for being adult. **<RTHS>** *In conclusion, I strongly agree that college students should be encouraged to have a part time job by following these reasons; the sense of money and preparation for being adults.* **<SS: addition to RTHS>** Of course, concentrating on studying is important things, but we can get many things by part time job not from doing study.

Figure 7-19. An example of RST relations typical of the concluding paragraph (G2-1, Topic 12).

Oshima and Hougue (2006) suggested providing a strong, effective ending that a reader will remember. Although most of our students knew (or at least had learned in the past) the importance of a strong ending and some of their essays did contain an effective KK or *Kicker,* as in Figure 7-20, most students must have found it difficult to produce one. In Figure 7-20, an alternative *solution* of working on weekends is provided, which contributes to creating a persuasive ending.

RST Diagram	RTHS - KK ↑ ⌐ SLTN
Text	**<RTHS>** Even though there are some disagreements about the part time job, it will make students more matured due to the chance to communicate adults which happen never before and the responsibility toward parents and job. **<KK: solution to RTHS>** If to think the way to concentrate on study more, they also can choose to have a part time job just on weekends or the holidays.

Figure 7-20. An example of RST relations typical of a concluding paragraph (G1-9, Topic 12).

In the case of L-group, their concluding paragraphs followed Pattern 3 in Table 7-4 where there is no RTHS but instead a TS, or no TS at all. An RTHS (17.86%) was present in Topic 12 but not in Topic 13. In contrast, there was a high proportion of EXs in both topics (Topic 12: 61.21%; Topic 13: 44.86%) as well as the *unknown* tag (Topic 12: 12.86%; Topic 13: 16.39%). This means that even in the final paragraph, there seems to have been no ending to the argument and, in fact, six essays were unfinished.[3]

These sections so far have described the features of organization identified within the paragraphs. In the next section, the organization of the entire essays written by G and L-group students are discussed in order to summarize the findings in this chapter.

7.3.4 RST Relations of the Entire Essays

The features of the essays written by students with different English proficiency levels differ substantially. Most of the essays written by G-group students followed a typical five-paragraph essay organization as shown in Figure 5-1 with appropriate SF components. In this organization, the essay starts with a THS in the introductory paragraph, is supported by two to three body paragraphs with SF Patterns 4 to 6 (see Table 7-3), and ends with a restatement of the thesis (RTHS) in the concluding paragraph.

In addition, the same RST relations are repeatedly used for the entire logical construction, while the argument flow is linear. Several patterns of RST relations have been found in the body paragraphs, including [*reason – elaboration/example*], [*problem/reason – result/ elaboration/ solution*], and [*reason/problem – (CS)result/restatement/conclusion*]. In the introductory paragraph, one or two pieces of *background information* precede the THS, and the THS is followed by the *organizer*

(ORG). In the body paragraphs, TS as a sub-claim often presents a *reason* as to why the writer approves (or disapproves) the given topic (part-time job or smoking), as stated in the THS, followed by the SSs of *elaboration* with/or another SS or EXs of *example* to justify the reason. The CS presents the *restatement* of the argument in the entire paragraph or a *conclusion* to the argument immediately before. The concluding paragraph has such a RST relation as restatement of thesis – *addition/conclusion/interpretation*. Therefore, one typical flow of the RST relations essays written by G1/2 is [(**INT**) *background* – (**THS**) *statement of thesis* – (**ORG**) *organizer*]   – [(**TS** as *reason*) – (**SSs** or **EXs**) *elaboration/example* - (**CS**) *restatement/conclusion*] – [(**RTHS**) *restatement* – *addition/conclusion/interpretation*].

The essays represented by a diagram in Figures 7-21 and 7-22 are the typical examples for Topic 12. Both essays support having a part-time job with an introductory paragraph of Pattern 2 [INT$^{1-4}$ – **THS** (**ORG** is included.)]. Body paragraphs are either Pattern 5 [**TS** (-EX)-SS (-EX$^{1-3}$)-**CS**] or 6 [**TS** (-EX)-SS^1 (-EX$^{1-3}$)-SS^{2-n} (EX^{1-n})-**CS**] patterns in which three *reasons* to support a part-time job are *elaborated* with, for example, *example* of the persons whom a student communicates with through the job in the second paragraph in Figure 7-21 (see the essay in Table 7-8).

(Paragraph 1) INT^1 - INT^2 - INT^3 -THS (ORG is included)

EVDC   BGRD

BGRD

(Paragraph 2)   **TS** - **SS** - EX^1- $\underline{EX^2 - EX^3}$ - **CS**

ELBR   CNTR   RSLT

EXMP

RTRN

RSON (to THS)
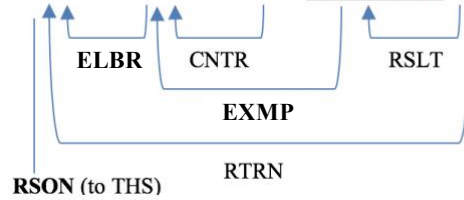
(Paragraph 3)   TS - SS - EX^1 - EX^2- EX^3- CS

ELBR PRBL ADTN INTP

RSON
(to THS)

RTRN
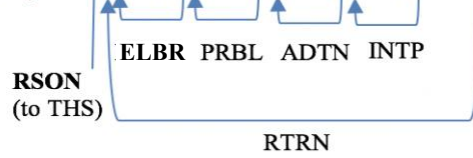
(Paragraph 4)   TS - EX^1 - EX^2 - EX^3 - EX^4 - CS

RSON   RSLT   RSLT   ELBR   JSTF   SLTN
(to THS)

RTRN
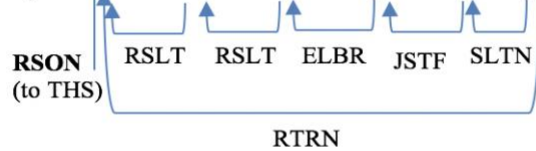
(Paragraph 5)   TS - EX^1 - KK

RSON

CNCL

Figure 7-21. An example of the rhetorical structure of the entire essay (G2-10, Topic 12).

Table 7-8.

The Essay Written by G2-10

"Part-time job"
Paragraph 1
<INT¹> There are many people who have a part-time job.
<INT²>According to a research, about ninety percent of college students have experienced doing a part-time job until their graduation.
<INT³> Some people say students should focus on their study, not a part-time job.
<THS> However, I think the experience of part-time job help them **(ORG)** in terms of enhancing communication skills, having proper manners, and having a good chance to think of their own future.
Paragraph 2
<TS> The first point is communication skills.
<SS> College students can talk with other generations if they have a part time job.
<EX¹> In the fact, when they are in a college, they talk with only their friends or seniors who are just one or two years older than them.
<EX²> However, for example, students can talk with children and bosses as a teacher at a cram school, and learn how they teach for children for more comprehensions.
<EX³> If they sell something, they think how to explain goods to sell.
<CS> These examples are all related with communication skills: how they make people understood or convinced.
Paragraph 3
<TS> The second point is proper manners.
<SS> If students start working, they need to be conscious as a member of the society.
<EX¹> Sometimes, students come in late to classes or even do not come.
<EX²> In addition to this, some students do not use expect language for their teachers.
<EX³> Such behaviors is not allowed especially, after having a job.
<CS> In the workplace as a part time job is a good chance to practice.
Paragraph 4
<TS> Last but not least, college students can consider about their future through a part time job.
<EX¹> They can learn what is "working", what are their own favorite things to do or how hard it is to earn money.
<EX²> Through overall experiences, students have an image as a member of the society.
<EX³> If they decide what they want to do after the graduation, they can prepare earlier while school days.
<EX⁴>It is said that there are many college students who do not know what they want to do in the future even after starting a hunting job.
<CS> A part time job might give some hints to decide their future.
Paragraph 5
<TS> In conclusion, a part time job is a good experience to enhance their abilities or thoughts.
<EX¹> Not only earning money, but also having precious times may be one of big reasons to do a part time job.
<KK>It is not favorable to disturb their study, but there are a lot of things to learn form a part time job.

The essay quoted in Figure 7-22 has more complicated structures with RST relations than the essay in Figure 7-21. In the essay in Table 7-9, the *experience* students could have gained while in college such as *traveling abroad* is described as an *example* in the second paragraph. Thus, the second paragraph has one SS to *restate* the TS, followed by several EXs, which are all *elaboration* of the SS in Figure 7-22. The similar structures can be found in the third and fourth paragraph to elaborate the writer's claims in TSs.

Contrast relations can frequently be observed both in the introductory and body paragraphs. Objective discussions of the two contrasting situations inevitably strengthen the writer's opinion. For example, in writing Topic 12 essays as found in Figure 7-21, merits and demerits of two contrasting situations (e.g., school vs. workplace) where students communicate with the others, are explained in the second paragraph, followed by further description of these two situations.

As for Topic 13, both the introductory and concluding paragraphs show a similar rhetorical flow as Topic 12; however, in some body paragraphs, TS as a sub-claim presents a *problem* to the THS caused by smoking, followed by SSs that are either *elaboration* or *reason* to justify the TS. This is often followed by another SS, describing a *solution* to the TS. The RST structure in Figure 7-23 (see Table 7-10 for this essay) is one such example. The writer of this essay insists on a total smoking ban in restaurants, starting the introductory paragraph with two contrasted opinions in INT^1 and INT^2. The organizer (ORG) includes three demerits of smoking, which are further explained in the body paragraphs; thus, TSs in the second and third paragraphs are *reasons* to the THS, followed by *elaborations* of the hazards of smoking. In the fourth paragraph, separation

of smoking areas is presented as one popular solution in the restaurants; however, it is followed by the limitation of separated areas (e.g., secondhand smoke leakage).

RST Diagram

(Paragraph 1) INT^1 - INT^2 - INT^3 -THS^1(ORG)- THS^2
PRPH   ELBR   RSON
RSON
ELBR

(Paragraph 2) TS   - SS - EX^1 - EX^2 - EX^3- EX^4 - EX^5 - EX^6 - CS
RTRN EXMP ELBR   SLTN ELBR   CNCL
RSON   (EX^3) PRBL(to EX^1)   RSLT
(to THS)
RTRN

ELBR

(Paragraph 3) TS - EX - SS^1 - SS^2 - EX - CS
CRCM ADTN RSLT CNCL
RSON   (SS^1) EXMP (to TS)
(to THS)
RTRN

ELBR

(Paragraph 4) TS - SS^1 - EX -   SS^2 - EX^1 - EX^2 - CS
RSON ELBR   INTP   RSLT   ADT
(to   CNTR
THS)
CNCL
RTRN (to TS)

SMRY (to THS)

(Paragraph 5) SS -   RTHS - KK
CNTR   RTRN

Figure 7-22. An example of the rhetorical structure of the entire essay (G1-3, Topic 12).

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Table 7-9.

The Essay Written by G1-3

"Part-time job"
Paragraph 1
<INT¹> Some people say that college students should not have a part time job so that they can concentrate on studying;
<INT²> however, not having a part time job does not mean they can concentrate on studying.
<INT³> In fact, many students have a part time job and they make good grades in college.
<THS¹> Moreover, having a part time job has many advantages for college students; **(ORG)** they can make money by themselves, they can learn many things through a part time job, and they can have various relationships.
<THS²> Thus, college students should be encouraged to have a part time job.
Paragraph 2
<TS> First, college students can make money by themselves by having a part time job, which allow them to have opportunities to do many things.
<SS> Students should experience a lot of valuable things while they are college students;
<EX¹> for example, traveling around the world is important thing for young people to experience.
<EX²> Going to other countries helps students to find their own way to live, and it is one of the most valuable things to experience new world.
<EX³> College students should travel a lot; however, it costs a lot also.
<EX⁴> Having a part time job and making money allows students to do that.
<EX⁵> Although some parents pay all for students to travel, traveling by money that they earned by themselves does have meaning.
<EX⁶> They can realize the importance of making money and experience new things.
<CS> Thus, making money by themselves is a great thing for college students.
Paragraph 3
<TS> Second, college students should be encouraged to have a part time job because they can learn many things through a part time job.
<EX> When they work for companies, they are responsible for their jobs, even though they are part time worker.
<SS¹> College students can learn responsibility through a part time job.
<SS²> Moreover, they can experience many things that they cannot do in their college such as selling products, talking with customers, and dealing with problems, though it depends on kinds of job.
<EX> It helps them to do well when they get a job in the future, and it also helps them to get a job.
<CS> They can learn many things thorough a part time job.
Paragraph 4
<TS> Finally, college students should have a part time job because they can have various relationships.
<SS¹> Usually students have a lot of friends in their college or around their hometown, and their friends are often almost same age as them.
<EX> Of course it is good thing for college students to have many friends who are same generation as them;
<SS²> however, they can meet a lot of people who are very older than them through a part time job.

<EX> There are many things that students can learn from older people because they experienced much more than young people, and it is good thing to work together with them.

<SS³> Moreover, students might have opportunities to meet important people of companies, it motivates students to make efforts and study.

<CS> Having various relationships is great thing for students.

Paragraph 5

<SS> In conclusion, college students should study hard, and they have much time to do many things they want to do.

<RTHS> However, college students should be encouraged to have a part time job because they can make money by themselves, they can learn many things through a part time job, and they can spend time with people who they cannot meet in college life.

<KK> College students have many things to learn and do, having a part time job allows them to learn and do many things.
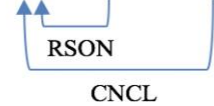
<end>
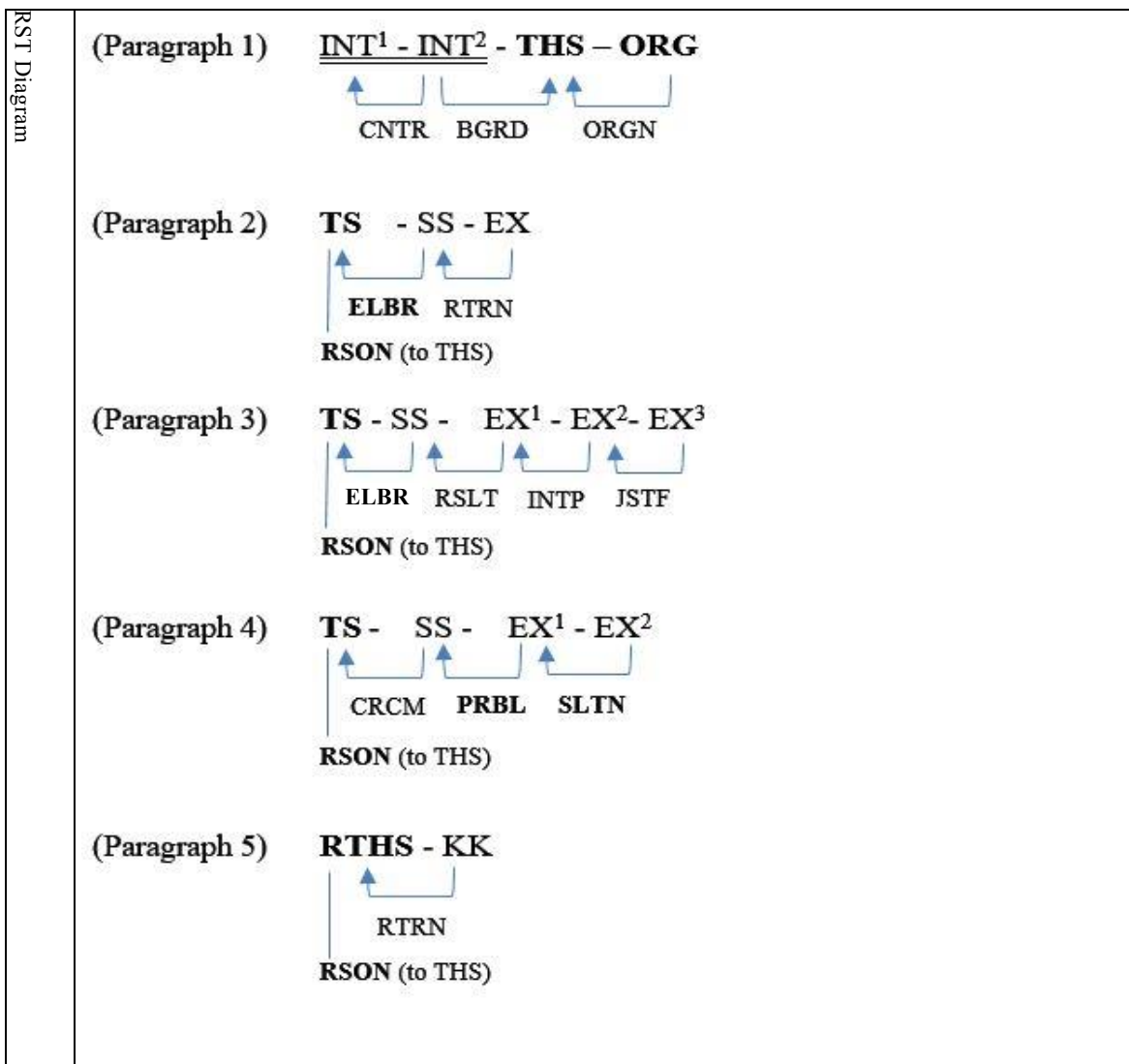
Figure 7-23. An example of the rhetorical structure of the entire essay (G1-9 Topic 13).

Table 7-10.

The Essay Written by G1-9

"Smoking"

Paragraph 1

<INT¹> These days, numerous people believe that smoking in restaurants should be allowed and that they have the every right to smoke in restaurants.

<INT²> However, there are also people that believe that smoking in restaurants should be totally banned and I strongly agree with this idea.

<THS> I believe that smoking should be totally banned in restaurants.

<ORG> Today, I would like to state the three main reasons why I think so.

Paragraph 2

<TS> Firstly, it will ruin the meal for other people.

<SS> It may be okay for people who are always smoking when eating at restaurants, but for people who do not smoke, the smell of the cigarette will ruin the their meal by making the taste of the food awful.

<EX> Of course, the most important factor of the food is taste, but the extremely strong smell of the cigarette can easily take away the appetite and also the taste of the food.

Paragraph 3

<TS> Secondly, smokers would be killing people without knowing it.

<SS> In places like outside, people who do not smoke have a choice to avoid people who smoke, but in restaurants, people do not have that choice, since there are all in the same atmosphere.

<EX¹> As a result, non-smokers will eventually inhale the smoke which will cause a huge damage to the lungs.

<EX²> It may be okay for smokers to damage their lungs since they`re all aware of it, but they do not have the right to cause serious damage to other people lungs who do not even smoke.

<EX³> In addition, it is a fact that the smoke that comes out from the mouth of smokers which is called "secondhand smoke" causes more damage to lungs than the "mainstream smoke" which is the smoke that smokers take in.

Paragraph 4

<TS> Finally, the number of customers who are non-smokers will decrease hugely.

<SS> In many restaurants, there is a smoking area and a non-smoking area for both types of customers.

<EX¹> However, in most cases, smokers are able to bear a few minutes not smoking when eating, but most non-smokers really cannot bear the smell of the smoke which makes them go to another restaurant if the non-smoking area of that restaurant was currently full.

<EX²> By banning smoking at restaurants and getting rid of the smoking booths, more customers would be able to eat at restaurants and will eventually become a profit for the restaurant itself.

Paragraph 5

<RTHS> Therefore, I strongly believe that smoking in restaurants should totally be banned.

<KK> I know that banning smoking in restaurants is a really hard thing for smokers, but I hope that smoking in restaurants would be totally banned one day, so that everyone can have a healthy and a good meal.

The *problem* sentence (EX[1]) in the fourth paragraph in Figure 7-23 is further followed by a *solution* of a total-ban on smoking. As found in this essay, two patterns of [*reason – elaboration/example*] and [*problem – result/ elaboration/ solution*] are used to structure logical flow of argument in the body paragraphs. Although this essay does not have a CS, CS in Pattern 4-6 often presents a *result/conclusion/restatement* of "smoking in the public place," for example, the negative effect of smoking or the *result* of smoking. Alternatively, a *conclusion* to the argument is presented immediately before or there is a *restatement* of the argument in the overall paragraph.

The most salient feature of L-group, on the other hand, is that the introductory paragraph started with a THS, followed by *elaboration, interpretation, result* with SS or EXs (Pattern 4 in Table 7-1). Since too much information was inserted in the first paragraph, the writers tended to lose the trajectory of the argument. This can be one of the reasons why six essays were left unfinished. The example given in Figure 7-24 (see Table 7-11 for this essay) is a particular case in point. This essay starts with the writer's opinion of a total-ban on smoking. However, unrelated information is inserted immediately after the THS and the coherency of the argument is thus interrupted. This is where the NLOG tag can be applied, or where a logical anomaly occurs.
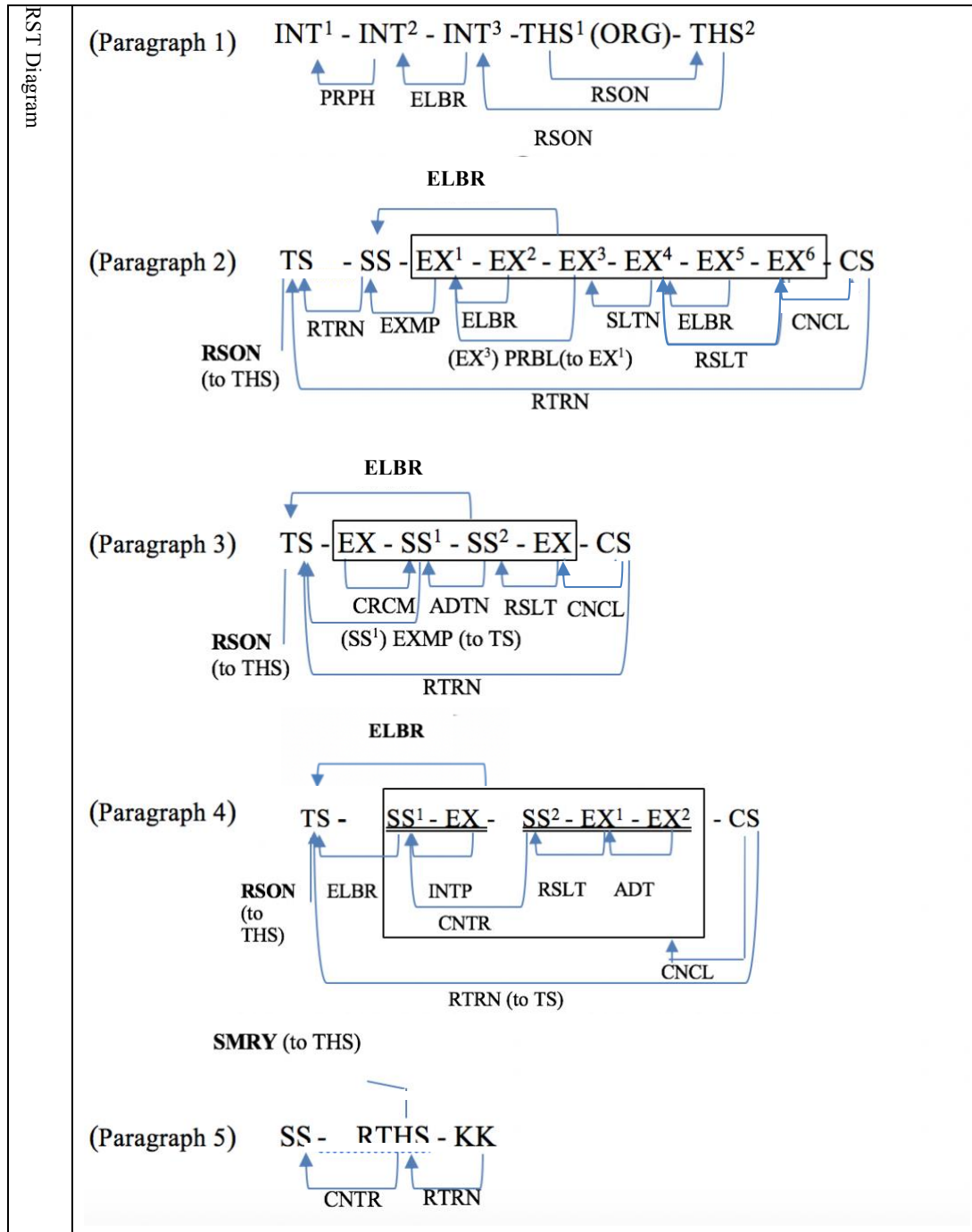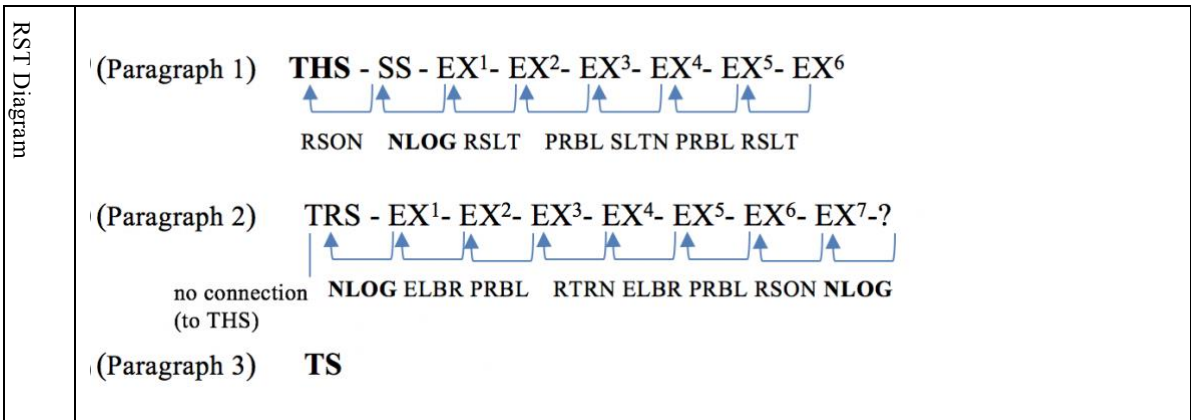

Figure 7-24. An example of the rhetorical structure of the entire essay (L-4, Topic 13).

Table 7-11.

The Essay Written by L-4

> **"Smoking"**
> Paragraph 1
> **<THS>** I'm in the position that smoking be completely banned at all the public places.
> **<SS>** Smoking only give human's body bad effect such as lung cancer.
> **<EX¹>** Nicotine, the material which is contained in tobacco, is more toxic than heroin.
> **<EX²>** People who smoke tobacco on daily basis have a tendency fell into nicotine dependence syndrome without their conscious.
> **<EX³>** It is a kind of mental disorder and you cannot stop smoking with your own will.
> **<EX⁴>** You have to go hospital and take a medical attention immediately.
> **<EX⁵>** You would need a lot of money to buy a lot of medicine or to take consultation.
> **<EX⁶>** And you would charge heavy burden on your whole family.
> Paragraph 2
> **<TRS>** The affection of tobacco is not entirely that.
> **<EX¹>** For example, there is one married couple.
> **<EX²>** The husband is smoker and his wife is non-smoker.
> **<EX³>** They are in the restaurant and he is smoking now.
> **<EX⁴>** Of course, he gets a lot of harmful material from tobacco but his wife gets them either.
> **<EX⁵>** It means that smoking give effect not only the person who is smoking but also the person who is NOT smoking.
> **<EX⁶>** It is called second hand smoke and it has been social problems along with smoking in the public places.
> **<EX⁷>** It is because, non-smoker can get harmful materials more than smoker can get.
> **<?>**Specialist said they have cancer-causing property.
> Paragraph 3
> **<TS>** As you can see, smoking at the public places give a lot of harmful effect not only smokers but also non-smokers.

Another feature of L-group essays is that there are body paragraphs starting with SSs or EXs other than TS (Pattern 7 in Table 7-2). The information which does not directly contribute to the main idea precedes a TS, and that information is often tagged as *NLOG*. The essay quoted in Figure 7-25 (see the essay in Table 7-12) has this pattern in both of the second and the third paragraphs. In both cases, the TS relatively comes in the latter part of the paragraph. In the third paragraph, for example, the writer's experience

of a part-time job precedes the TS placed in the second sentence from the last in the third paragraph. The problem is that the first sentence of both the second and third paragraph are not connected to the previous paragraph logically as if both paragraphs stood alone. It is apparent that, due to the lack of ORG, which is another feature, the topic which is not directly related to the THS suddenly begins in the second paragraph.

Figure 7-25. An example of the rhetorical structure of the entire essay (L-2, Topic 12).

Table 7-12.

The Essay Written by L-2

"Part-time job"
Paragraph 1
<THS> I believe that college students be encouraged to have a part time job.
<EX¹> Therefore, if you are college students and you can afford to work part-time, I would like you to work part-time.
<EX²> The experience of work which before get out into the world as a member of society is very importance for students.
Paragraph 2
<?> The college students may be above the age of 19.
<?> You may have friends who already work as a member of society.
<?> And college students may have can afford to work part-time.

(Table 7-12. continues)

(Table 7-12. continued)

<?> Then you should earn your money of freely use.
<TS> So If you work part-time, you will be able to earn money.
<TRS> But the good point of working before you become a member of society is not only that.
Paragraph 3
<EX[1]> I have worked part-time since I was high school first-year student.
<EX[2]> I worked local branch of Macdonald'.
<EX[3]> The job made me very happy.
<EX[4]> I could have a sense of achievement when I was able to many jobs.
<EX[5]> I could feel a pleasure when I was able to friend with people who work with me.
<EX[6]> But having a part-time job is not only happy but hard.
<EX[7]> Though I worked part-time, the job is strict.
<EX[8]> Because if I fall down, the effect of my miss influence customers and colleagues.
<EX[9]> I think that my miss cause customers and colleagues, I feel that the job differ from play and study.
<EX[10]> The people who work part-time clearly differ from full-time worker.
<EX[11]> But if you work part-time, you will be able to see how is the job and work.
<TS> So I think that the experience of work which before get out into the world as a member of society is very importance for students.

<CS> Therefore I recommend college students to work part-time.

7.4 Summary of Study 1

In Chapter 7, the results of rhetorical organization in each of the introduction, body, and concluding paragraph have been examined, together with the results of the SF analysis. The features of organization specific to each cohort have been identified and have been found to be influenced by students' respective levels of English proficiency. Most of G1/G2's essays were fit into the organizational patterns typical of the five-paragraph essay and argument was developed linearly. On the contrary, the L-group essays had a higher proportion of *unknown* SF tags and *NLOG* RST tags than in G1 and G2, which must be attributed to their rhetorical organization far from that of a standard essay.

In the next chapter, two more analysis, or MDM and keyword analysis, will be discussed, followed by the discussion for the results of the analysis with four frameworks.

Notes

1. Effect size *w*: large= 0.5, medium= 0.3, small= 0.1

2. "?" is tagged to sentences that are functionally uncertain; thus, the "*unknown tag*" is applied. The parts where no RST relations can be applied must be related to rhetorical anomalies (coherence breaks). This notion of rhetorical anomalies, which were examined in the author's pilot study, will be discussed further in Chapter 9.

3. There is also a high possibility that L-group students were not able to finish their essays because they wrote under the time-constraint situation.

8. Study 2: Cohesion across Paragraphs

8.1 Purpose of Study 2

In this chapter, the use of keywords as topical/thematic coherence (Hymes, 1974) and MDM as categorized by Hyland (2005) are examined. As mentioned in Chapter 5, these two elements are important as Oshima and Hougue (2006) noted that keywords are repeated, and transition signals effectively connect the ideas (see **5.1**). While the first two frameworks of the SF and RST analyses looked at macro and micro organization of the essay or coherence of the ideas, Keywords-Chain Analysis and Metadiscourse Markers (MDM) Mapping look at the connectivity or cohesion of ideas. The purpose of Study 2 is to identify the characteristic usage of keywords or MDMs in the essays written by G-group and L-group students. The results of quantitative analysis of both Keywords-Chain Analysis and Metadiscourse Markers (MDM) Mapping are firstly described, followed by in-depth qualitative investigation of both analyses.

8.2 Quantitative Analysis

8.2.1 Keywords-Chain Analysis

Table 8-1 shows the average number and average total number of keywords used in the essays written by G-group and L-group students. The average number of argument-setting keywords (AKs) was higher than theme-setting keywords (TKs) in all groups in both topics, and frequency of AKs in G1 was higher than G2 and L-group. Comparing the two topics, the number of keywords, both TK and AK, was higher in Topic 13 than Topic 12. The result of the pilot study conducted on the essays written by two students (see **5.6**) indicated that essays with more AKs tended to have more discussions. In this sense, students developed the ability to engage in more discussions

for Topic 13 than Topic 12. This, however, did not mean that the quality of the essay written for Topic 13 improved because the overall evaluation score was not statistically significant (see Table 6-3). In addition, since it was difficult to identify how keywords were used effectively solely from their frequencies of use, the contents of discussion needed to be examined.

Table 8-1.

Average Number of Keywords Used in the Essays Written by G- and L-group Students (Topics 12 and 13)

Groups		Topic 12 (*N*=29)		Topic 13 (*N*=29)	
		Theme-setting keywords (total)	Argument-setting keywords (total)	Theme-setting keywords (total)	Argument-setting keywords (total)
G1	*M*	2.0 (22.9)	6.7 (26.5)	3.6 (28.5)	6.6 (23.6)
	S.D.	0.0 (6.20)	2.69 (11.78)	1.28 (11.55)	2.06 (7.40)
G2	*M*	2.3 (21.9)	4.6 (14.5)	4.2 (24.8)	6.3 (18.4)
	S.D.	0.4 (8.4)	1.3 (5.0)	1.3 (7.3)	1.6 (4.7)
L-group	*M*	2.7 (17.3)	3.4 (9.7)	3.7 (17.4)	4.7 (15.8)
	S.D.	1.4 (11.0)	2.3 (7.3)	1.2 (9.0)	3.1 (11.9)

Table 8-2 lists the keywords used in the essays. The words used as AK suggest what kinds of argumentation students made in each essay. As to Topic 12, for example, the *advantages* and *disadvantages* of having a part-time job constitute some of the major arguments in these essays. In fact, many of the students were writing about such advantages as earning extra *money*, gaining *experience,* becoming a member of *society*, or preparing for *future jobs*. In the same vain, they also discussed the disadvantages of part-time jobs, such as losing *study* time.

As for Topic 13, almost all the essays adopted the position in opposition to

smoking in public places from the viewpoint of negative *health* effects of *smoking* and *second-hand smoke*. Providing *a separate (smoking) area* was presented as a solution. The *rights* of smokers and non-smokers were also debated in many of the essays across all proficiency levels.

Table 8-2.

Keywords Used in the Essays Written by G1, G2, and L-group Students

Topic 12 (N=29)

Theme-setting keywords (TKs)	part-time job, college students
Argument-setting keywords (AKs)	money, time, work, study, experience, society, advantages, disadvantages, responsibility, attitude, (solving) problems, adults, parents, learn, future job, etc.

Topic 13 (*N*=29)

Theme-setting keywords (TKs)	smoking, smokers, non-smokers, ban, in public (public places), restaurant
Argument-setting keywords (AKs)	smell, second-hand smoke (passive smoking), rights (of smokers and non-smokers), separate, smoking area (non-smoking area), enjoy, health, manner, etc.

8.2.2 Metadiscourse Markers Mapping

Table 8-3 shows the total number of MDMs grouped by major categories as used by the three groups of students (see the list of MDMs used in this study in Table 5-2). It was evident that *transition markers* were used most frequently, followed by *code glosses* and *sequencing markers* by all groups. Through examination of the statistics, these three categories and the other categories combined in Table 8-4, L-group used *sequencing markers* less frequently, while G1 used the *other* categories statistically frequently, especially with *label stages* and *announce goals* (14 and 17 respectively in Table 8-3).

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G2 used *sequencing markers* frequently, while *code glosses* were used less than the other

two groups ($\chi^2(6) = 19.50$, $p = .0034$, *power* = 0.93, $w = 0.15$, small).

Table 8-3.

MDM Categories and Their Frequencies in the Three Groups of Students

MDM categories	G1	G2	L-group
Code Glosses	50	25	27
Endophoric Markers	8	5	1
Evidentials	1	2	0
Sequencing	42	45	10
Label stages	14	12	2
Announce goals	17	6	1
Shift topic	1	0	3
Transition Markers	263	225	140
Others	5	0	6
Total	401	320	190

Table 8-4.

The Frequencies of Three MDM Categories and the Other Categories

Combined by the Three Groups of Students

MDM categories	G1	G2	L-group
Code Glosses	50	$25^{*\downarrow}$	27
Sequencing	42	$45^{*\uparrow}$	$10^{*\downarrow}$
Transition Markers	263	225	140
Others (except above three categories)	$46^{*\uparrow}$	25	13
Total	401	320	190

Note. * $p < .05$; An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row.

As for the individual words in *transition markers* (see Tables 8-5 and Appendix 6 for the list of three major MDMs), G1 and G2 displayed similar features and "and," "because," "however" were used most frequently, and among them, such words as "because" (56 in G1) and "however" (42 in G2) were statistically more frequent than the other proficiency groups in Table 8-5 ($\chi^2(16) = 84.33$, $p = .001$, *power* = 1, $w = 0.39$, medium). "Because" was used to provide reasons to support the writer's claim, while frequent use of "however" was one of the features identified in G-group. For example, "however" was often found in *contrast* relations in both introductory and body paragraphs in their essays. In Yamashita's study (2014), students in G-group in KUBEC version 2012 overused such *transition markers* as "however," "therefore," and "moreover," to show the academic tone of their essays. Although "moreover" was not often used, "however," and "therefore" were frequently used in the current study, indicating similar features across the years of KUBEC project. On the other hand, compared to the total number of *transition markers* among the three groups in Table 8-3, L-group used these *transition markers* less than G-groups (G1 263; G2 225; L-group 140). The words overused by L-group were "and (And)," "but (But)," "so (So)," which are often identified in essays written by students at an entry level of English proficiency (Narita & Sugiura, 2006 ; Tono, 2007). On the other hand, such *transition markers* as "because," "because of," "however," and "In addition" were all statistically used less than those of G-groups. The variety of usage of *transition markers* was limited even among the G-group, and this is what the previous learner corpus have found, compared to the use of *transition markers* by the NSEs. Learners tend to use a limited variety of transition markers predominantly (e.g., Ringbom, 1998; Ishikawa, 2013).

As to MDMs categorized as *code glosses* (see Appendix 6)*,* L-group used "for example" frequently, while G-groups frequently used "especially," and "in fact," to focus on a particular topic, and "such as," "that is," and "mean," to give an example or an alternative frequently.

Table 8-5.

The Most Frequent Transition Markers in the Three Groups of Students

	G1	%	G2	%	L	%
and (And)	60	27.65	57	28.79	50[*↑]	38.76
because (Because)	56[***↑]	25.81	31	15.66	13[*↓]	10.08
because of (Because of)	18	8.29	12	6.06	2[*↓]	1.55
but (But)	13[*↓]	5.99	18	9.09	24[***↑]	18.60
however (However)	27	12.44	42[*↑]	21.21	5[*↓]	3.88
In addition (to)	7	3.23	9	4.55	0[*↓]	0.00
Moreover	12	5.53	7	3.54	6	4.65
so (So)	6[**↓]	2.76	12	6.06	22[***↑]	17.05
Therefore (therefore)	18	8.29	10	5.05	7	5.43
Total	217		198		129	

Note. Unit of this table is frequency and % within each group; *** $p < .001$ ** $p < .01$ * $p < .05$; An upward arrow shows that the frequency is statistically higher than the other cohort while a downward arrow shows that the frequency is lower than the other cohort in the same row.

The overuse of *sequencing markers* including "firstly," "first of all," "secondly," "the first (second) reason is..," and "finally" was found in G-group, indicating that their essays followed a typical structure with statements presented in order. L-group, on the contrary, had only a frequency of 10 in *sequencing markers* as shown in Table 8-3. Among the *other* categories, *announce goals* and *label stages* specifically, "this essay"

(G1, frequency of 8) and "in conclusion" (13 in G1, 11 in G2) were also found in G-groups. As described in Yamashita (2014), using such *sequencing markers* as "firstly," "secondly," "thirdly," and "finally," "this essay," and "in conclusion," essays written by G-group students in particular were structured as if the students were automatically placing their ideas into the "frame" of the essay they had learned. Having identified the numbers and types of keywords and MDMs, the next section examines how they are used throughout the entire essay.

8.3 Qualitative Analysis: Keywords-Chain Analysis and Metadiscourse Markers Mapping

As found in the pilot study (see **5.6**), the critical finding was that the position of keywords was crucial, and most G-group students used keywords fairly effectively. TKs appeared in the introductory paragraph as the main topic of the essay, and were used repeatedly across the body paragraphs to the conclusion. AKs usually appeared as part of THS or ORG components in the final part of the introductory paragraph since this part is very important in terms of setting the direction of the entire essay, or what would be discussed in the essay. These words re-appeared in each of the TSs, or in most cases, in the first sentence of each body paragraph, and in the RTHS or in a summary statement of the concluding paragraph.

In the essay quoted in Figure 8-1, TKs are *college students* and *part-time job* (Frequency: 37). AKs include *money, learn many things,* and *various relationships* (Frequency: 26). The writer supports having a part-time job because doing so may provide students with opportunities to earn money, learn things other than study, and to have relationships with people other than college students. The TKs are used repeatedly

throughout the entire essay after the first sentence of the first paragraph. Three major AKs, i.e. *money, learn many things,* and *relationships,* appear in the final sentences including the THS[1] (ORG is included) and THS[2] of the first paragraph and re-appeared in each TS of the body paragraphs. In the second paragraph, one of the AKs, *money* (line 6 in Figure 8-1), is related to another AK, *experience* (line 7), and then to *traveling* (line 8) or *going to other countries* (line 9) in the context that the money gained from a part-time job enables students to have valuable *experiences* such as *traveling.* The word *experience* is also used in the third and fourth paragraphs to explain what *experiences* students may have gained by a part-time job, thus logically connecting the body paragraphs.

Another AK, *learn many things* (line 4 in Figure 8-1) or the things that students can learn is repeated in the third and final paragraphs via a variation in the fourth paragraph. The third AK, *relationships* with people from other walks of life (line 4 in Figure 8-1), is described in the fourth paragraph to discuss a merit of having a part-time job. Then, these AKs are repeated in RTHS for a summary of discussion. The chain of keywords indicates that the argument under the given topic is fairly well developed.

The MDM mapping in Figure 8-2 shows that this writer tried to use a variety of MDMs appropriately to construct a well-developed logical flow for her argument. The frequent use of *transition* and *sequencing markers,* and *code glosses* identified in G-group essays was apparent (see Table 8-3). This essay was constructed with a typical organization starting with the main idea, a proponent of a part-time job, followed by the reasons with "First (line 6 in Figure 8-2)," "Second (line 16)," and "Finally (line 22)" placed in a TS in each body paragraph, and "In conclusion" in RTHS (line 29) to summarize the discussion. With these MDMs, it seemed that the essay was globally well-organized.

<1st paragraph>
1. [INT¹] Some people say that college students should not have a part time job so that they can concentrate on studying;

2. [INT²] however, not having a part time job does not mean they can concentrate on studying.

3. [INT³] In fact, many students have a part time job and they make good grades in college.

4. [THS¹] Moreover, having a part time job has many advantages for college students; they can make money by themselves, they can **learn many things** through a part time job, and they can have various **relationships**.

5. [THS²] Thus, college students should be encouraged to have a part time job.

<2nd paragraph>
6. [TS] First, college students can make money by themselves by having a part time job, which allow them to have opportunities to do many things.

7. [SS] Students should experience a lot of valuable things while they are college students;

8. [EX¹] for example, traveling around the world is important thing for young people to experience.

9. [EX²] Going to other countries helps students to find their own way to live, and it is one of the most valuable things to experience new world.

10. [EX³] College students should travel a lot;

11. [EX⁴] however, it costs a lot also.

12. [EX⁵] Having a part time job and making money allows students to do that.

13. [EX⁶] Although some parents pay all for students to travel, traveling by money that they earned by themselves does have meaning.

14. [EX⁷] They can realize the importance of making money and experience new things.

15. [CS] Thus, making money by themselves is a great thing for college students.

<3rd paragraph>
16. [TS] Second, college students should be encouraged to have a part time job because they can **learn many things** through a part time job.

17. [EX] When they work for companies, they are responsible for their jobs, even though they are part time worker.

18. [SS¹] College students can learn responsibility through a part time job.

19. [SS²] Moreover, they can experience many things that they cannot do in their college such as selling products, talking with customers, and dealing with problems, though it depends on kinds of job.

20. [EX] It helps them to do well when they get a job in the future, and it also helps them to get a job.

21. [CS] They can **learn many things** thorough a part time job.

<4th paragraph>
22. [TS] Finally, college students should have a part time job because they can have various **relationships.**

23. [SS¹] Usually students have a lot of friends in their college or around their hometown, and their friends are often almost same age as them.

24. [EX] Of course it is good thing for college students to have many friends who are same generation as them;

25. [SS²] however, they can meet a lot of people who are very older than them through a part time job.

26. [EX] There are **many things that students can learn** from older people because they experienced much more than young people, and it is good thing to work together with them.

27. [SS³] Moreover, students might have opportunities to meet important people of companies, [and] it motivates students to make efforts and study.

28. [CS] Having various **relationships** is great thing for students.

<5th paragraph>
29. [SS] In conclusion, college students should study hard, and they have much time to do many things they want to do.

30. [RTHS] However, college students should be encouraged to have a part time job because they can make money by themselves, they can **learn many things** through a part time job, and they can spend time with people who they cannot meet in college life.

31. [KK] College students have **many things to learn** and do, having a part time job allows them to **learn and do many things.**

Figure 8-1. An example of an argument-setting keywords-chain in G-group essay (G1-3, Topic 12).

<1st paragraph>

1. [INT¹] Some people say that college students should not have a part time job so that they can concentrate on studying;

2. [INT²] however, not having a part time job does not mean they can concentrate on studying.

3. [INT³] In fact, many students have a part time job and they make good grades in college.

4. [THS¹] Moreover, having a part time job has many advantages for college students; they can make money by themselves, they can learn many things through a part time job, and they can have various relationships.

5. [THS²] Thus, college students should be encouraged to have a part time job.

<2nd paragraph>

6. [TS] First, college students can make money by themselves by having a part time job, which allow them to have opportunities to do many things.

7. [SS] Students should experience a lot of valuable things while they are college students;

8. [EX¹] for example, traveling around the world is important thing for young people to experience.

9. [EX²] Going to other countries helps students to find their own way to live, and it is one of the most valuable experience new world.

10. [EX³] college students should travel a lot;

11. [EX⁴] however, it costs a lot also.

12. [EX⁵] Having a part time job and making money allows students to do that.

13. [EX⁶] Although some parents pay all for students to travel, traveling by money that they earned by themselves does have meaning.

14. [EX⁷] They can realize the importance of making money and experience new things.

15. [CS] Thus, making money by themselves is a great thing for college students.

<3rd paragraph>

16. [TS] Second, college students should be encouraged to have a part time job because they can learn many things through a part time job.

17. [EX] When they work for companies, they are responsible for their jobs, even though they are part time worker.

18. [SS¹] College students can learn responsibility through a part time job.

19. [SS²] Moreover, they can experience many things that they cannot do in their college such as selling products, talking with customers, and dealing with problems, though it depends on kinds of job.

20. [EX] It helps them to do well when they get a job in the future, and it also helps them to get a job.

21. [CS] They can learn many things thorough a part time job.

<4th paragraph>

22. [TS] Finally, college students should have a part time job because they can have various relationships.

23. [SS¹] Usually students have a lot of friends in their college or around their hometown, and their friends are often almost same age as them.

24. [EX] Of course it is good thing for college students to have many friends who are same generation as them;

25. [SS²] however, they can meet a lot of people who are very older than them through a part time job.

26. [EX] There are many things that students can learn from older people because they experienced much more than young people, and it is good thing to work together with them.

27. [SS³] Moreover, students might have opportunities to meet important people of companies, [and] it motivates students to make efforts and study.

28. [CS] Having various relationships is great thing for students.

<5th paragraph>

29. [SS] In conclusion, college students should study hard, and they have much time to do many things they want to do.

30. [RTHS] However, college students should be encouraged to have a part time job because they can make money by themselves, they can learn many things through a part time job, and they can spend time with people who they cannot meet in college life.

31. [KK] College students have many things to learn and do, having a part time job allows them to learn and do many things.

Local link

Global link

Figure 8-2. An example of an MDM mapping in G-group essay (G1-3, Topic 12).

133

This essay in Figure 8-2 was also locally organized within paragraphs with a layer of MDMs. In the introductory paragraph, proponent's opinion about a part-time job was contrasted with opponent's opinion with *however* (line 2). Then, the additional reason was followed with *moreover* (line 4)*,* and the paragraph concluded with *thus* (line 5) in THS to reiterate the writer's position.

The prime feature of the body paragraphs is that the first sentence was always followed by either a reason or an example. "Because" was used four times, and two times in line 16 and 22 in Figure 8-2, for example, providing the concrete reason or evidence to support the writer's claim described as a TS in the third and fourth paragraphs. As an example*, traveling* was introduced as one of the AKs in line 8 with "for example."

Another feature was that an additional reason was often introduced with "moreover," (lines 19, and 27) for example, about who students can meet in the workplace in addition to older people in line 27. Then, the paragraphs often concluded with "thus" in CS in order to restate the writer's view as found in line 15. The use of "however," which was one of the frequent MDMs in G1 and G2, is particularly important in order to contrast this writer's view and the opponent's view in line 30, or to show his/her understanding to the counter opinion to his/her in line 25. This writer emphasized the benefit of meeting the elderly people in line 25-26 in Figure 8-2, while she acknowledged the merit of having friends with the same age in line 24 (*Of course it is good thing for college students to have many friends who are same generation as them*). This is a rhetorical technique called *concession,* instances of which are often observed in the English essays written by Japanese (Oi & Kamimura, 1996). Using a variety of MDMs, layers of discussion were being developed within paragraphs, creating local

cohesion in the essay. This effective use of MDMs implies that this essay can be quite convincing to the readers.

Another example from G2 student in Figure 8-3 (G2-10) shows the similar feature as found in Figure 8-2. This essay was, however, shorter and total frequencies of both keywords were lower than the essay in Figure 8-2. Even with this difference, organization seemed linear with the appropriate use of keywords and MDMs. There were some TKs such as *part-time job* and *students* (Frequency: 15) and AKs such as *study, experience, communication skills, proper manner* and having a good chance to think of their *future* (Frequency: 18). This writer discussed *experience* gained from a part-time job with three AKs as *communication skills, manner*, *future,* which were placed in the last sentence of the first paragraph functioned as THS (ORG is included), reappearing in the TSs one by one. These AKs were incorporated as central ideas of the writer in each of the body paragraphs; for example, the writer insisted that *communication skills* as an AK gained through talking with people with different generations in the job could be the benefit for the students in the second paragraph. *Proper manners* and *communication skills* were also used in TS and CS twice, further creating cohesion within the paragraph. In the fourth paragraph, *future* was used three times in lines 17, 21 and 22 in Figure 8-3, putting an emphasis on the opportunity provided for students to think about their *future* through the *experience* of a part-time job, another important AK in this essay. Although *study* was only used twice in lines 3 and 25, this is also one of the important AKs in the essay. While this writer supported having a part-time job, he also insisted that students should study.

The MDMs colored in yellow in Figure 8-3 were not frequently used, compared to the essay quoted in Figure 8-1; however, they were used rather appropriately to guide the

flow of organization with some MDMs. Global cohesion was created by *sequencing*

markers as "the first point is…," "the second point is…," "last but not least," and "in

conclusion" in the beginning of each paragraph.

<1st paragraph>
1. [**INT¹**] There are many people who have a part-time job.
2. [**INT²**] According to a research, about ninety percent of college students have experienced doing a part-time job until their graduation.
3. [**INT³**] Some people say students should focus on their study, not a part-time job.
4. [**THS**] However, I think the experience of part-time job help them in terms of enhancing communication skills, having proper manners, and having a good chance to think of their own future.

<2nd paragraph >
5. [**TS**] The first point is communication skills.
6. [**SS**] College students can talk with other generations if they have a part time job.
7. [**EX¹**] In fact, when they are in a college, they talk with only their friends or seniors who are just one or two years older than them.
8. [**EX²**] However, for example, students can talk with children and bosses as a teacher at a cram school, and learn how they teach for children for more comprehensions.
9. [**EX³**] If they sell something, they think how to explain goods to sell.
10. [**CS**] These examples are all related with communication skills: how they make people understood or
          ed.

Global link

<3rd paragraph >
11. [**TS**] The second point is proper manners.
12. [**SS**] If students start working, they need to be conscious as a member of the society.
13. [**EX¹**] Sometimes, students come in late to classes or even do not come.
14. [**EX²**] In addition to this, some students do not use expect language for their teachers.
15. [**EX³**] Such behaviors is not allowed especially, after having a job.
16. [**CS**] In the workplace as a part time job is a good chance to practice proper manners.

<4th paragraph >
17. [**TS**] Last but not least, college students can consider about their future through a part time job.
18. [**EX¹**] They can learn what is "working", what are their own favorite things to do or how hard it is to earn money.
19. [**EX²**] Through overall experiences, students have an image as a member of the society.
20. [**EX³**] If they decide what they want to do after the graduation, they can prepare earlier while school days.
21. [**EX⁴**] It is said that there are many college students who do not know what they want to do in the future even after starting a hunting jobs.
22. [**CS**] A part time job might give some hints to decide their future.

<5th paragraph >
23. [**TS**] In conclusion, a part time job is a good experience to enhance their abilities or thoughts.
24. [**EX⁴**] Not only earning money, but also having precious times may be one of big reasons to do a part time job.
25. [**KK**] It is not favorable to disturb their study, but there are a lot of things to learn form a part time job.
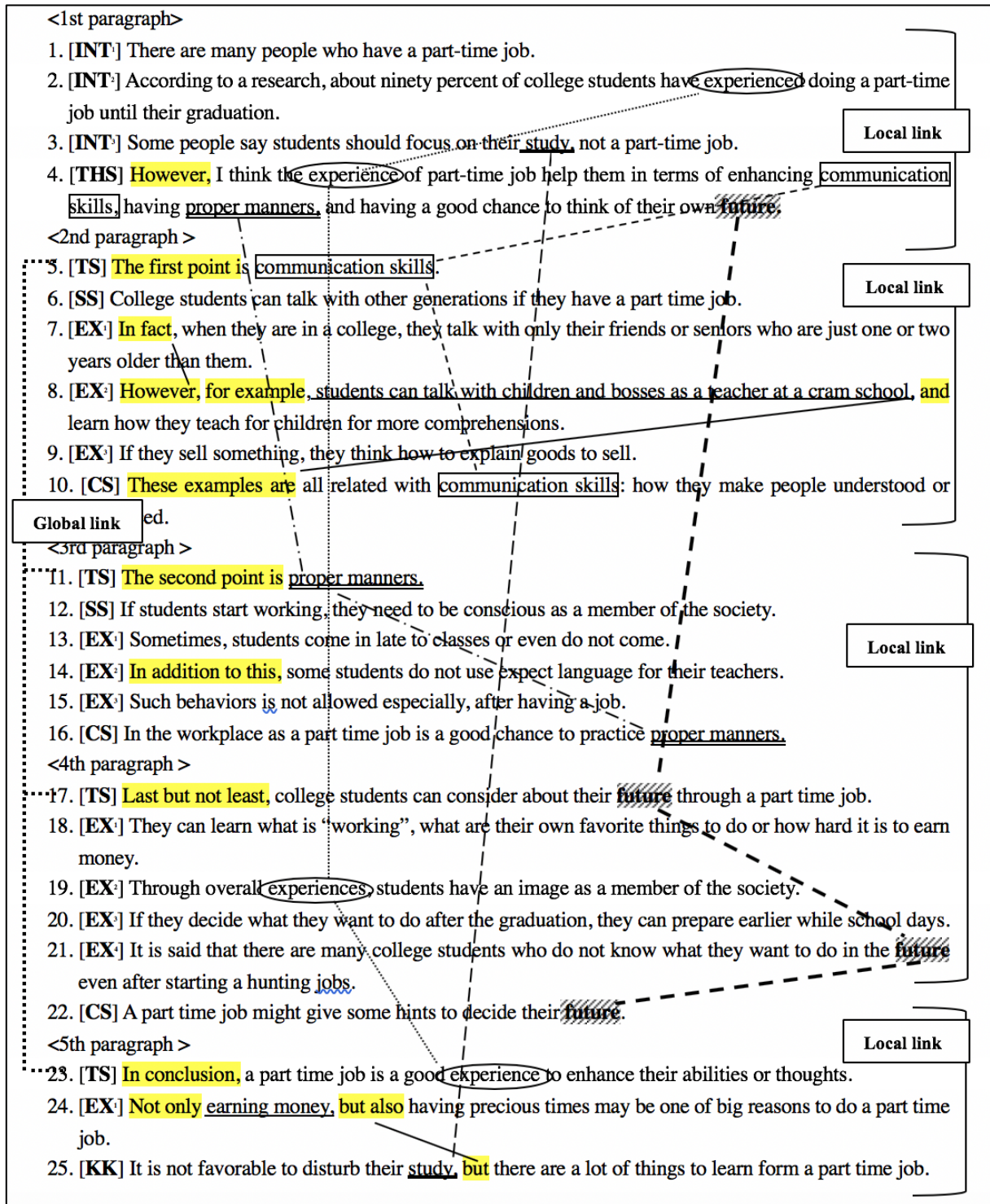
Local link *(×4)*

Figure 8-3. An example of an argument-setting keywords-chain and a MDM mapping in G-group essay (G2-10, Topic 12).

Within paragraphs, "however" was contrasted between opinions of opponents and proponents towards part-time job in the first paragraph (line 4), and used again in the second paragraph (line 8) to contrast between the situation of university and the workplace, highlighting the benefits of a part-time job. In the third paragraph, an example of proper manners was further elaborated, starting with *in addition to this* (line 14).

The noticeable finding is that MDMs and keywords often complemented each other to create cohesion within a paragraph. For example, there was not any MDMs other than "last but not least" in the fourth paragraph of this essay. More MDMs could have been used; however, two AKs, *future* and *experience,* helped create cohesion locally. Although the concluding paragraph did not include a summary of discussion with AKs, keywords and MDMs showed that this essay was organized fairly both globally and locally.

On the other hand, most of the L-group essays had a stark difference from G-group essays. For example, the L-group essays did not have keywords in an appropriate position, and they appeared rather sporadically. The example presented in Figure 8-4 contains five TKs (Frequency: 18), *smoking, smoker(s), non-smoker(s), public places,* and *tobacco*, and only three AKs (Frequency: 7), *nicotine, (harmful) material(s),* and *effect.* At a glance, the limited number of AKs and their positions in Figure 8-4 suggested that the discussions with these three words were not fully developed. In this essay, it was obvious that the writer intended to discuss both *(harmful) material(s)* contained in tobacco and the bad health *effects* of smoking; however, these two keywords were not explained fully. In the first paragraph, a lung cancer (a bad *effect*) caused from *nicotine,* another AK as a *(harmful) material* could have been discussed.

<1st paragraph>

1. [THS] I' m in the position that smoking be completely banned at all the public places.

2. [SS] Smoking only give human's body bad effect such as lung cancer.

3. [EX¹] Nicotine, the material which is contained in tobacco, is more toxic than heroin.

4. [EX²] People who smoke tobacco on daily basis have a tendeney fell into nicotine dependence syndrome without their conscious.

5. [EX³] It is a kind of mental disorder and you cannot stop smoking with your own will.

6. [EX⁴] You have to go hospital and take a medical attention immediately.

7. [EX⁵] You would need a lot of money to buy a lot of medicine or to take consultation.

8. [EX⁶] And you would charge heavy burden on your whole family.

<2nd paragraph >

9. [TRS?] The affection of tobacco is not entirely that.

10. [EX¹] For example, there is one married couple.

11. [EX²] The husband is smoker and his wife is non-smoker.

12. [EX³] They are in the restaurant and he is smoking now.

13. [EX⁴] Of course, he gets a lot of harmful material from tobacco but his wife gets them either.

14. [EX⁵] It means that smoking give effect not only the person who is smoking but also the person who is NOT smoking.

15. [EX⁶] It is called second hand smoke and it has been social problems along with smoking in the public places.

16. [EX⁷] It is because, non-smoker can get harmful materials more than smoker can get.

17. [?] Specialist said they have cancer causing property.

<3rd paragraph >

18. [TS] As you can see, smoking at the public places give a lot of harmful effect not only smokers but also non-smokers.

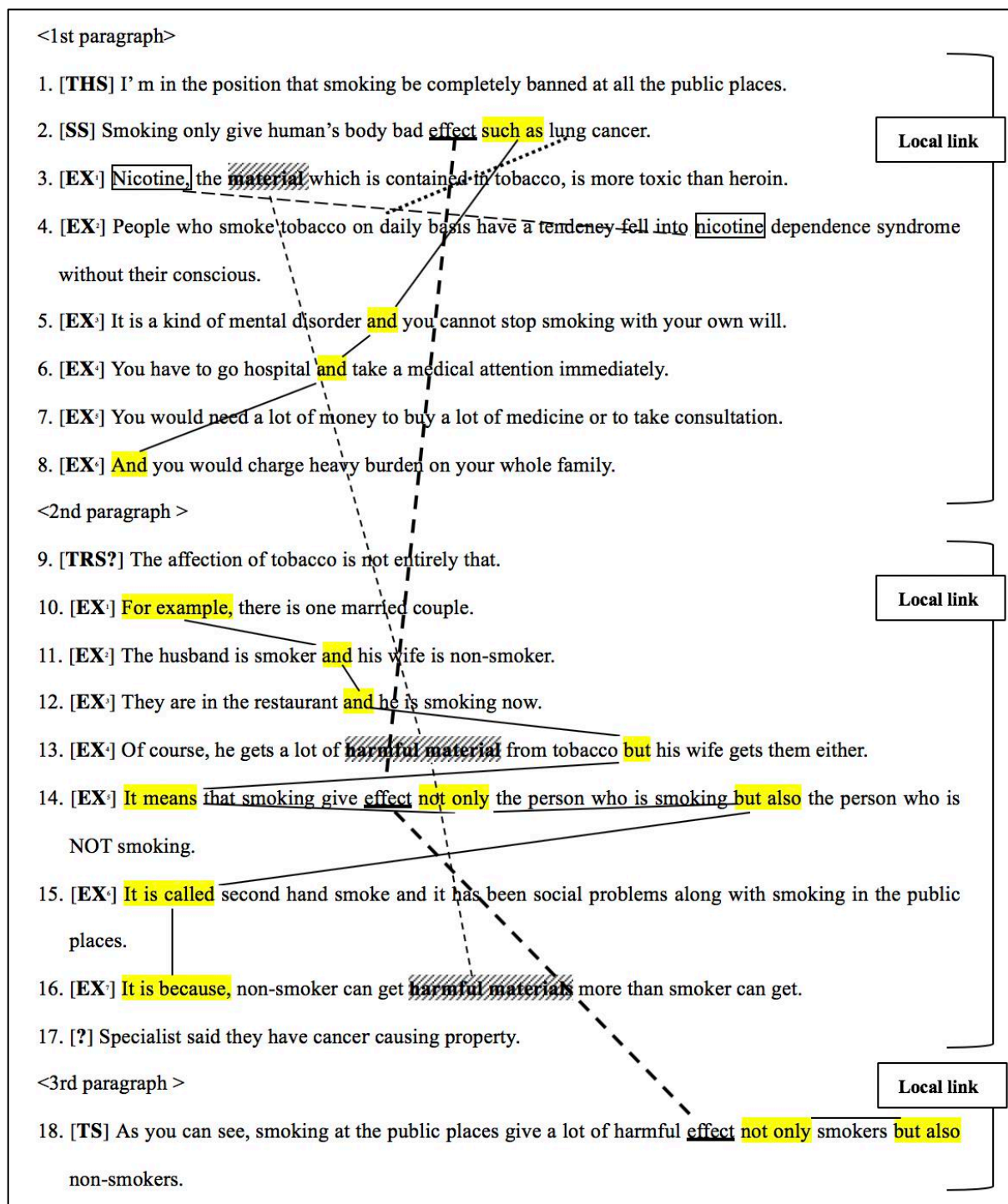Local link

Local link

Local link

Figure 8-4. An example of argument-setting keywords-chain and a MDM mapping in essays with lower evaluation (L-4, Topic 13).

However, the discussion went into the nicotine dependence syndrome, which obviously deviated the course of discussion already in the introductory paragraph (see **7.2.1**). In

addition, this writer might have wanted to discuss another negative *effect* of tobacco, a second-hand smoking caused from *(harmful) material*. However, this topic was not fully discussed in the second paragraph.

In order to prevent this disorganization, the writer should have placed AKs in the ORG sentence, which was important to show the writer/readers what topics to discuss in the essay. In this essay, without the ORG, the ill-effects of tobacco were not focused, causing deviation of the topics to discuss. The *bad effects on health (smokers)* and *second-hand smoking* as two AKs should have been clearly stated in ORG.

Another salient feature of keywords used in the essays written by L-group students is that the same keywords were used repeatedly in exactly the same expressions. Students were unable to change these words into semantically-related words or expressions, which is ascribed to the students' limited knowledge of English vocabulary.

The problem of the usage of MDMs was also obvious because there was no organizational global linkage without the use of any discourse markers to connect paragraphs (see Figure 8-4). Although local cohesion could be identified with "and" and "but," this essay had a simpler distribution of MDMs than the G-group essay quoted in Figure 8-3. It seemed that the discussion went on with several "and" in both of the first and second paragraphs without any concluding statement. At a glance, the use of MDMs shows that the argument was not fully explored. It was also obvious that L-group students attempted to combine simple sentences with the *transition markers,* "and," "but," and "so." The sentence-initial positions of "and" in line 8 and "for example" in line 10 were the typical features of beginner level essays (Narita & Sugiura, 2006; Tono, 2007).

Another example of the L-group essay in Figure 8-5 shows that logical shift can also be detected just by following the keywords.
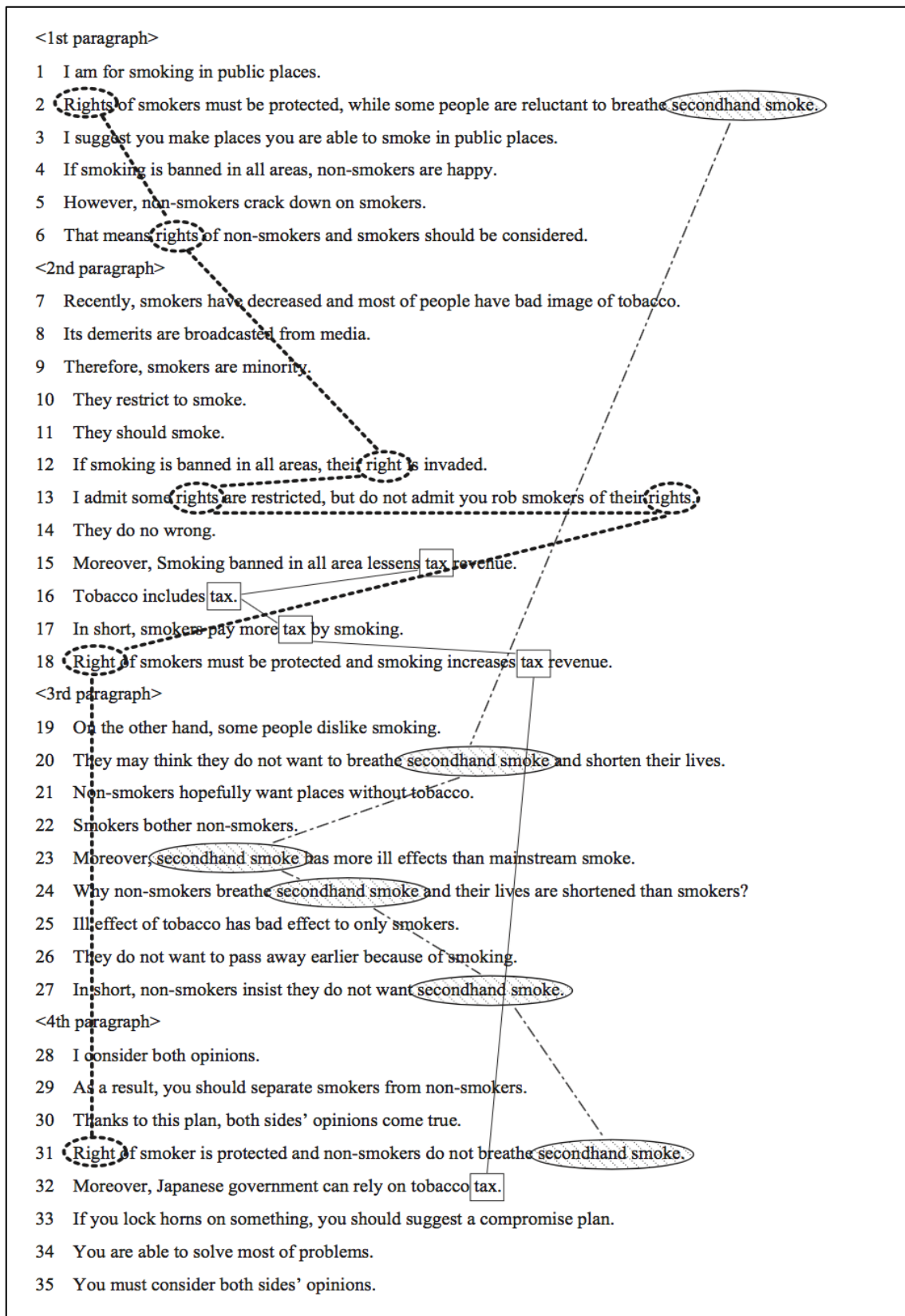
<1st paragraph>

1   I am for smoking in public places.

2   Rights of smokers must be protected, while some people are reluctant to breathe secondhand smoke.

3   I suggest you make places you are able to smoke in public places.

4   If smoking is banned in all areas, non-smokers are happy.

5   However, non-smokers crack down on smokers.

6   That means rights of non-smokers and smokers should be considered.

<2nd paragraph>

7   Recently, smokers have decreased and most of people have bad image of tobacco.

8   Its demerits are broadcasted from media.

9   Therefore, smokers are minority.

10   They restrict to smoke.

11   They should smoke.

12   If smoking is banned in all areas, their right is invaded.

13   I admit some rights are restricted, but do not admit you rob smokers of their rights.

14   They do no wrong.

15   Moreover, Smoking banned in all area lessens tax revenue.

16   Tobacco includes tax.

17   In short, smokers pay more tax by smoking.

18   Right of smokers must be protected and smoking increases tax revenue.

<3rd paragraph>

19   On the other hand, some people dislike smoking.

20   They may think they do not want to breathe secondhand smoke and shorten their lives.

21   Non-smokers hopefully want places without tobacco.

22   Smokers bother non-smokers.

23   Moreover, secondhand smoke has more ill effects than mainstream smoke.

24   Why non-smokers breathe secondhand smoke and their lives are shortened than smokers?

25   Ill effect of tobacco has bad effect to only smokers.

26   They do not want to pass away earlier because of smoking.

27   In short, non-smokers insist they do not want secondhand smoke.

<4th paragraph>

28   I consider both opinions.

29   As a result, you should separate smokers from non-smokers.

30   Thanks to this plan, both sides' opinions come true.

31   Right of smoker is protected and non-smokers do not breathe secondhand smoke.

32   Moreover, Japanese government can rely on tobacco tax.

33   If you lock horns on something, you should suggest a compromise plan.

34   You are able to solve most of problems.

35   You must consider both sides' opinions.

Figure 8-5. An example of an argument-setting keywords-chain and MDM mapping in essays with lower evaluation (L-9, Topic 13).

While this writer acknowledged the ill-effects of second-hand smoking, he asserted that smokers' rights should be protected in THS. Two AKs, the *rights* of smokers and the bad effects of *second-hand smoke,* were discussed consecutively in the second and the third paragraphs, thus connecting both discussions from beginning to end. The problem here is that a logical break occurred when the topic of *tax* (tax revenue) was suddenly inserted in the final part of the second paragraph (line 15). The writer claimed that the ban on smoking in public places would decrease the number of smokers, leading to a reduction in (tobacco) tax revenue as a demerit of a total-ban on smoking. His argument, however, was rather irrelevant, since the ban on smoking in public places was not necessarily linked with the reduced number of smokers. In fact, protecting the smokers' rights and ensuring government revenue from tobacco tax are totally different claims. One of the major features of the Keywords-Chain Analysis is that this type of logical break can be found simply by tracing a network of keywords. The new topic which is suddenly inserted in the middle of the essay tends to be logically collapsed.

8.4 Summary of Study 2

In Chapter 8, Keywords-Chain Analysis and Metadiscourse Markers (MDM) Mapping were conducted. The important finding is that the repetition of keywords and their relative positions are crucial for the coherence and cohesion of the essay. In a good essay where ideas are coherently developed, the theme-setting keywords (TKs) are repeated across the body paragraphs. The argument-setting keywords (AKs) are often included in the THS or ORG which is usually at the end of the introductory paragraph with the role of directing the course of discussion throughout the essay. They appear

again in the TSs in the body paragraphs, connecting the paragraphs logically. The abrupt topic shift can be detected when the new AK suddenly appears in the middle of the essay.

The MDMs used in G-group essays included *transition markers* (*and, however, therefore, moreover*)*, sequencing markers* (*firstly, secondly, finally*)*, and *code glosses* (*for example, in conclusion, mean, in fact, especially*). A more variety of these metadiscourse markers were used to show the layers of discussion, while L-group essays contained a limited number of such MDMs as *and, but,* and *so* in the sentence-initial position. The interesting phenomenon is that a mere glance at the sequence of transition markers, or MDM mapping, can help to grasp the logical flow of the argument as shown in Figures 8-2 and 8-3.

8.5 Discussion for Studies 1 and 2

Based on the results of the four analyses, namely the SF Analysis, RST Analysis, MDM Analysis, and Keywords Analysis, the rhetorical patterns and logical organization of the essays as a whole written by KUBEC students are examined in this section in an attempt to answer Research Question, in particular RQ1 which is quoted as follows:

RQ1. Are there any noticeable patterns of rhetorical organization among the students at three different English proficiency levels as well as their different English writing backgrounds?

As Studies 1 and 2 have revealed, the noticeable patterns of rhetorical organization among the students at different levels of English were identified. Although the essays written by G1 and G2 students showed relatively similar patterns, the difference between

G-groups and L-group was quite large. G-group essays were almost equivocally fit into the five-paragraph form with appropriate use of metadiscourse markers as a sign post. On the other hand, most of the L-group essays were devoid of a paragraph form and the use of MDMs was rather limited.

The reason for this noticeable difference between G-group and L-group students is as follows. In the previous studies described in **2.1**, the variables influencing the quality of L2 writing include L2 proficiency, L2 writing ability, composing competence, meta-linguistic ability (awareness of the system of the language), meta-knowledge (writing strategies), and so forth, and the complicated interactions among these many variables (e.g., Hirose & Sasaki, 1994; Kamimura, 1996; Kaplan, 1966; Kraples, 1990; Raimes, 1985; Sasaki & Hirose, 1996). In the current studies, students differ in terms of L2 proficiency including meta-linguistic ability (in both syntax and lexis), and L2 writing ability which are among the most influential factors in L2 writing (e.g., Carson & Kuehn, 1992; Cumming, 1989; Pennington & So, 1993; Sasaki & Hirose, 1996). They are inevitably ascribed to the higher quality of essays written by G-group students than L-group students. The average TOEFL scores in Table 6-1 show a difference among the groups, especially with a 100-point difference between G1 and L-groups. Since the standard error of measurement for TOEFL ITP is 13.0, a 100-point difference does have a significant meaning. The overall results of the essay evaluation in Table 6-2 also shows that L-group was significantly lower in every category than G1 and G2 groups. Due to their lower proficiency and time-limitation (Kroll, 1990), L-group students were unable to produce the essays with expected amount of words (see Table 4-3), and six essays were left unfinished. On the contrary, with both higher English proficiency and L2

writing ability, G-group students were able to produce the essays with a satisfactory amount of words under the time-constraint condition.

The result of Studies 1 and 2 could have been greatly attributed to the education students had received in the past (see **4.2.2**). There was a huge difference between the backgrounds of G-group and L-group. G-group students learned the basics of English essays in their first year, and all of them attended university in an English-speaking country where they underwent intensive English training under the SA program in their second year. The results of the questionnaire administered to them at the onset of their writing classes (see **6.1**) showed that G-group students had been given numerous English written assignments during their SA programs. This educational background could have improved students' L2 writing ability and meta-knowledge of writing, thus contributing to better quality in their English argumentative essays with its fixed organization of a five-paragraph form and a linear flow of logical development. The importance of writing experience together with instruction have been reported in the previous studies (Hirose & Sasaki, 2000; Rinnert & Kobayashi, 2007, 2009; Sasaki, 2002). The result of the current study can attest the findings from Hirose & Sasaki (2000) that instruction alone does not improve the quality of the text. By writing extensively over a period of time, G-group students might have internalized what they had learned from the past two years (Rinnert & Kobayashi, 2009). In other words, since the students showed that they possessed high English proficiency level, they most likely have had fully utilized the knowledge gained from their past studies.

The education and experience of writing in English, the G-group students had received must have been linked with their confidence in L2 essay writing. In the questionnaire survey, although there were some students who found difficulty in writing

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after taking the SA program in KUBEC version 2013, more students in G-group in Studies 1 and 2 showed more confidence in writing than L-group students (see **6.1**). This shows that confidence can have a positive impact on students' writing in L2 (Klassen, 2002; Pajares, 2003).

On the other hand, most L-group students, who had only learned English in Japan, had little experience of writing in English before entering university. In fact, there were students who had never written English "essays" before they started this writing class. With lower L2 proficiency and a lack of experience, it must have been difficult for L-group students to write an essay in English. Since L2 writing requires them to have a higher cognitive-load than L1 writing (e.g., Bosher, 1998; Cumming, 1989), it can be speculated that they merely translated what they intended to write in Japanese (in mind) into English on a sentence level (Cumming, 1989; Kobayashi & Rinnert, 1992; Raimes, 1985; Sasaki, 2000). Sasaki (2000) found that while expert writers keep paying attention to both local planning (e.g., grammar, vocabulary, phrases) and global planning (e.g., overall organization, coherence and cohesion), novice writers only focus on detailed local planning which prevents them from paying attention to global planning. It was highly possible that they took time on retrieving the grammatical items and vocabulary from their limited linguistic reservoir (Yamashita, 2013); therefore, similar to Sasaki's students, under the time-constraint situation, it was even more difficult to write faster and produce a longer text.

The other assumption regarding deviation from the paragraph form is that as found in Rinnert and Kobayashi (2007), students who did not receive proper academic writing training in both L1 and L2 may have resorted to their L1 writing experience in *saku-bun* (an essay with personal accounts) and borrowed the style of self-reflection or personal

accounts in L2 essays. The previous studies (e.g., Hirose, 2005; Rinnert & Kobayashi, 2007; Sasaki, 2009) found that both L1 and L2 writing instruction and particular kinds of writing experiences were all related to the specific features of Japanese writers' L1/L2 texts. Regarding this, the author examines more in the next chapter.

Limited experience of L2 writing and their low L2 proficiency could have been closely related to their lower confidence in L2 composition. Some of the students reported their strong anxiety of writing in L2 in the questionnaire survey, commenting that "I am very concerned about whether I will be able to keep up with the class." Their greater anxiety could have reduced confidence in their ability to write (e.g., Klassen, 2002; Lee & Krashen, 1997, 2002).

Even if L-group students learned how to write an English essay, including a 5-paragrah structure and usage of MDMs over the course of "Writing Ⅲ," they must have had difficulty in utilizing the knowledge with an appropriate writing strategy to write L2 essays in class. Sasaki (2000) argued that a one-year writing course is not enough for novice writers to fully acquire writing strategies in L2 writing. Low L2 proficiency, limited knowledge and strategy, and little experience and low confidence in L2 composition were all attributed to the low quality or deviation from the expected form of an argumentative essay in this study.

A possible pedagogical implication from the results is that L-group students need to start from *paragraph writing*. The need to fully understand a paragraph structure and align ideas with TS, SS and EXs and appropriate metadiscourse markers is evident. In addition, pre-writing activity should be recommended. In Sasaki's study (2000), novice writers tended to start writing without any global planning; however, their texts improved

in terms of organization and coherence, after pre-writing activities were introduced. Pedagogical implications are discussed in **10.3**.

In Studies 1 and Study 2, argumentative essays written by Japanese students at three different levels of English were compared. Using four analytical frameworks, typical features of students' L2 essays were identified. The four analytical frameworks have also proved to be useful to reveal whether the essay has a good quality or not. In the next chapter, which presents Study 3, the logical anomalies in the sentences tagged with NLOG will be examined, comparing students' L2 (English) essays and their L1 (Japanese) counterparts.

9. Study 3: Rhetorical Anomalies

9.1 Purpose of Study 3

In this section, in order to answer RQ2, rhetorical anomalies found in the RST analysis of English essays written by target students were examined. The author considered that the sentence elements wherein the "no logic" tag (i.e., *NLOG*) was assigned to places where there were rhetorical anomalies. In order to identify the features of rhetorical anomalies and their causes, the author examined and compared Japanese students' essays with their English counterparts written under the same topic by the same writers. Comparisons of the Japanese and English essay could give us more information; for example, it could prove that the rhetorical anomalies found in English essays were attributed to those found in Japanese essays. As already mentioned in **2.4.1**, dozens of past studies about contrastive rhetoric (Connor, 1996; Hirose, 2005; Kobayashi, 1984; Kubota; 1998, 2004; Matsuda, 1997; Oi & Kamimura, 1997) have ascribed rhetorical features of EFL essays to factors such as positive and negative transfer from L1, students' L2 proficiency, their L2 writing experience, and L1/L2 educational background. Since L2 writing education is not enough in the secondary school (Kawano & Nagakura, 2017, 2018; Oi, Itatsu, & Horne, 2015; Yasuda et al, 2014), students can resort to the rhetorical organization that they have learned in L1. Since the L1 writing education students have received is one of the influential factors to L2 writing (e.g., Sasaki & Hirose, 1996; Rinnert & Kobayashi, 2007, 2009), their Japanese way of logical construction (e.g., *ki-sho-ten-ketsu, or inductive-reasoning, personal involvement*) inevitably influences their English texts. Thus, it can be hypothesized that any type of logical anomaly detected in English texts may be partly attributed to the rhetorical conventions typical of

Japanese writing. In order to examine this L1 influence, comparison of L1 and L2 texts were conducted.

9.2 Numbers and Types of Anomalies

Table 9-1 (see procedure of analysis in **6.3**) shows the number of NLOG tags found in the essays written by the students in G1, G2, and L-group (10, 10 and 9, respectively.). In total, 116 cases of logical anomalies as represented by the NLOG tag were found. It is particularly evident that 68.96% of NLOG tags occurred in L-group essays, and the anomalies were mainly found in the body paragraphs. Compared to L-group, G1 and G2 had much fewer anomalies; however, G2 had 27 cases of logical break, while G1 had only nine cases of logical breaks. In G1 and G2, NLOG tags were found in body paragraphs in many cases, and also in the conclusion. On the other hand, L-group had more anomalies in the introductory paragraph than the conclusion, suggesting that their essays had already collapsed logically at the beginning of the essay.

Table 9-1.

The Number of Logical Break Tags in Three Groups

	Introduction	Body	Conclusion	Total	Percentage of anomalies out of total No. of sentences
G1	1	5	3	9 (7.75%)	1.99%
G2	4	15	8	27 (23.27%)	6.87%
L-group	23	43	14	80 (68.96%)	24.76%
Total	28	63	25	116	

Next, details of the logical breaks in each group were examined. As shown in Table 9-2, among eight types of a logical breaks,[1] *irrelevant ideas* (*N*=52), where "ideas

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are abruptly inserted, causing logical break from the previous sentence" was by far the most frequent, accounting for 44.8% of all logical breaks.

Table 9-2.

Eight Types of Logical Breaks in Three Groups

Logical breaks	G1	G2	L-group	Total no.	%
1. Irrelevant ideas (no connection to the previous sentences)	3	14	35	52	44.83
2. Incomprehensible sentences	1	0	21	22	18.97
3. Sudden topic shift/logical shift	2	5	9	16	13.79
4. Disconnection from the other paragraphs	0	3	8	11	9.48
5. Concession/new topic in the concluding paragraph	2	3	1	6	5.17
6. Too many subjective ideas/ mix of facts and opinions	0	0	6	6	5.17
7. Lack of information	0	2	0	2	1.72
8. Redundancy	1	0	0	1	0.86
Total	9	27	80	116	100

Others logical breaks included *incomprehensible sentences* (*N*=22, 18.97%), *sudden topic shift/logical shift* (*N*=16, 13.79%), *disconnection from the other paragraphs* (*N*=11, 9.48%), *concession or new topic in the concluding paragraph* (*N*=6, 5.17%), *too many subjective ideas/ mix of facts and opinions* (*N*=6, 5.17%), *lack of information* (*N*=2, 1.72%), and *redundancy* (*N*=1, 0.86%). L-group had the largest number of *incomprehensible sentences* (*N*=21) with many grammatical, syntactic, and lexical errors, which was a major problem with L-group essays. However, regardless of students' proficiency levels, the problems with *irrelevant ideas* and *sudden topic shift* were identified, and these two problems were two of the most frequent errors, namely *irrelevance* and *unjustified change/drift of topic,* found in previous studies (Maghfiroh,

2013; Skoufaki, 2009; Wikborg, 1985, 1990). Therefore, details of these two types of anomalies are the focus of this section. In the sample essays, sentences in question are underlined by this author.

9.3 Irrelevant Ideas Identified in L-group Essays

The case of *irrelevant ideas* occurred when more than one piece of information coexisted within a paragraph and information was disorganized. In most cases, the main claim was not clear and although present, it did not come at the beginning of the paragraph as a TS.

The example quoted in Table 9-3 shows that neither SF tags nor RST tags were assigned to most of the sentences in the second paragraph (P2) of the English essay. In the second paragraph, the question mark (e.g, <**?**: **NLOG**>) means that no SF tags could be assigned, and the NLOG tag means that the target sentence had no apparent logical connection to the preceding sentence. The problem is that the first sentence of the second paragraph does not obviously function as a TS, and this is apparently disconnected from the last sentence of the introductory paragraph (P1). Since the writer of this essay asserted the *importance of having work experience while in college* in the third sentence of the introductory paragraph (EX[2]), the readers naturally expect discussion in the second paragraph to be about what is gained from having a part-time job. The main idea of the second paragraph would be that "*earning money by a part-time job could be an important experience before becoming a member of society*," which reader can possibly infer from the second paragraph. Although this statement should be written in the first sentence of the second paragraph as the TS, the current first sentence, "*The college students may be above the age of 19*" is not appropriate as the TS, without any

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connection to the THS. In a standard structure of an English essay (see Figure 5-1), the first sentence of each body paragraph should constitute the TS, which directly supports the main idea of the introductory paragraph.

Table 9-3.

Excerpt of an Essay Written by L-group Student (Topic 12, L-5)

	English original	Japanese version
P1	**<THS>** I believe that college students should be encouraged to have a part time job. **<EX¹: NLOG>** Therefore if you are a college student and can afford to work part-time, I would like you to work part-time. **<EX²: elaboration to THS>** <u>The experience of working before getting out into the world as a member of society is very importance for students.</u>	**<THS:主張>**私は大学生はアルバイトをしたほうがいいと考えている。 **<EX¹:追加>**だから、もしあなたが大学生で、アルバイトをする時間的な余裕があるのなら、私はあなたにアルバイトをしてほしい。 **<EX²:理由>**社会人として社会に出る前に働く経験は大学生にとって、とても重要なものになるであろうからだ。
P2	**<?: NLOG>** The college students may be above the age of 19. **<?: NLOG>** You may have friends who are already working as a member of society. **<?: NLOG>** And college students may have can afford to work part-time. **<?: NLOG>** Then you should earn money you can use freely. **<(TS)?: NLOG>** So If you work part-time, you will be able to earn money. **<TRS: NLOG>** But the good point of working before you become a member of society is not only that.	**<SS:背景-後述のTS>**日本では大学生なら19歳を越えているだろう。 **<EX¹:追加-SS>**あなたと同じ年で、すでに社会人として働いている友人もいるだろう。 **<EX²:補足-EX¹>**そして大学生は学生だが、高校生に比べてアルバイトをする時間的な余裕もあるはずだ。 **<TS:主張>**<u>だから大学生は自分が自由に使うお金くらいは自分で稼ぐべきだ。あなたがアルバイトをすれば、その分のお金を稼ぐことができるだろうから。</u> **<TRS:方向付け>**しかし、社会人になる前に働くことの良い点はそれだけではない。
P3	**<EX¹: NLOG>** I have worked part-time since I was high school first-year student. **<EX²: elaboration to EX¹>** I worked at a local branch of McDonald's. **<EX³: result to EX²>** The job made me very happy. **<EX⁴: addition to EX³>** I could have a sense of achievement when I was able to do many jobs.	**<TS:話題の提示>**私は高校一年生の時から、地元のマクドナルドでアルバイトをしていました。 **<SS:結果-TS>**そこでの仕事は私をとても幸せにしてくれました。 **<EX¹:追加-SS>**私はさまざまな仕事ができるようになるたびに達成感を得ていました。

(Table 9-3. continues)

(Table 9-3. continued)

	English original	Japanese version
P3	**<EX⁵: addition to EX³>** I could feel a pleasure when I was able to make friends with people who work with me. **<EX⁶: contrast to EX³>** But having a part-time job is not only happy but hard. (continues to P4 and P5)	**<EX²:追加-EX¹>**職場の人たちと仲良くなれたときは喜びを感じていました。 **<EX³:反予測- EX²>**しかし、仕事は楽しいだけではなく、辛いこともありました。 **<EX⁴:解釈- EX³>**アルバイトとはいえ、仕事は厳しいものです。（以下 P4 および P5 省略）

The same problem is found in the first sentence of the third paragraph as well. This writer starts the paragraph with a personal experience of a part-time job quite abruptly, without any apparent logical connection to the previous paragraph. This problem can be regarded as a case of *unjust change of topic/drift of topic* (Wikborg, 1985, 1990), which means that irrelevant information disregards readers' expectations. In the essays written by Swedish university EFL students, Wikborg (1985, 1990) found that *unjust change of topic/drift of topic* was one of the most frequently appearing coherence breaks.

In the Japanese version of the essay[2] in Table 9-3, on the other hand, it was found that RST tags were assigned to all sentences and that the second paragraph had a rather inductive discussion with the TS placed in the second sentence from the bottom. The first three sentences altogether are considered as the *background* for the main idea (TS) that comes later in the paragraph, and the reader can understand that information without a direct link to the previous sentence is somehow connected to the information that comes later. The reader of this essay could infer the writer's intention, "*college students who are 19 or older are able to earn money from work,*" from SS to EX², and this is linked to the fourth sentence of P2 as a TS ("*Thus, they should work a part-time job." That is an important experience before becoming a member of society)*. In Japanese, readers can

infer what the writer intends to say even without the intention being specifically explained. Due to this *reader-responsible culture,* readers can guess what they mean in the context in Japanese. In addition, the main idea often comes later in the paragraph in Japanese (Kinoshita, 1981; Miura, 2009). In this regard, the writer of the English essay might have transferred the L1 convention of inductive organization, which is often used and accepted in Japanese essays (e.g., Kubota, 1998; Oi, 2005a). Organization of English texts, however, need to be linear with a deductive organization with the writer's intentions explicitly stated at the beginning of the paragraph.

The immediate problem here is that the writer did not include an *organizer* with which he could give the orientation of the essay. The keyword analysis in **8.3** showed that AKs written in ORG at the end of the first paragraph, connecting them to the TSs in each paragraph, are crucial for a high-quality essay. The ORG sentence in this example could be "*The importance of work experience will be described from the two points: earning money and gaining a sense of achievement.*" With this ORG, "*importance, earning money,* and *gaining a sense of achievement*" will be the AKs to discuss. Placing these keywords in the TS in each body paragraph will create a coherence of argument. In this essay, "*a member of society*" and "*importance*" in the last sentence of the introductory paragraph could be argument-setting keywords. However, these words are, unfortunately, not used in the body paragraphs as keywords appropriately, thus failing to create a connection between the paragraphs.

The essay quoted in Table 9-4 was a similar case of a disconnection caused by *irrelevant ideas.* Two main problems were identified in the introductory paragraph.

Table 9-4.

Excerpt of an Essay Written by L-group Student (Topic 13, L-4)

	English original	Japanese version
P1	<**THS**> I'm in the position that smoking should be completely banned at all the public places. <**SS: reason to THS**> Smoking only give human's body bad effects such as causing lung cancer. [sic] <**EX^1: NLOG**> Nicotine, the substance contained in tobacco, is more toxic than heroin. <**EX^2: result from EX^1**> People who smoke tobacco on daily basis have a tendency to fall into nicotine dependence syndrome without being aware of it.[sic] <**EX^3: problem to EX^2**> It is a kind of mental disorder and you cannot stop smoking at your own will. <**EX^4: solution to EX^3**> You have to go to hospital and receive medical attention immediately. <**EX^5: problem to EX^4**> You would need a lot of money to buy medicine or to receive medical consultation. <**EX^6: result from EX^5**> And you could charge heavy burden on your family.	<**THS：主題**>私は、公共の場所での喫煙は完全に禁止するべきだと思う。 <**SS：理由-THS**>喫煙は、たとえば肺がんのような、人間の体に悪影響を与えるからだ。 <**EX^1：問題-SS**>タバコに含まれているニコチンは、ヘロインよりも依存性が強い。 <**EX^2：結果- EX^1**>そのために、日常的にタバコを吸う人は、彼らの意識とは関係なしにニコチン中毒に陥ることがあるのだ。 <**EX^3：詳述- EX^2**>これは一種の精神疾患で、自分の意志では禁煙できなくなる。 <**EX^4：追加- EX^3**>そうなれば、すぐに病院に行き、医学的な治療を受けなければならなくなる。 <**EX^5：追加- EX^4**>薬を買ったり、診察を受けたりするのに多額のお金が必要になるであろう。 <**EX^6：追加- EX^5**>また、家族にも負担をかけることとなる。
P2	<**TRS: NLOG**> The effect of smoking is not limited to this. <**EX^1: NLOG**> For example, suppose there is one married couple. <**EX^2: elaboration to EX^1**> The husband is smoker and his wife is non smoker. <**EX^3: elaboration to EX^2**> They are in the restaurant and he is smoking now. <**EX^4: problem to EX^3**> Of course, he gets a lot of harmful substances from tobacco but his wife also gets them, too. <**EX^5: reiteration/restatement to EX^4**> <u>It means that smoking gives bad effects not only the person who is smoking but also the person who do not smoke.</u> <**EX^6: elaboration to EX^5**> <u>It is called second-hand smoking and it has been a social problem along with smoking in the public places.</u>	<**TRS：理由-THS**><u>喫煙の影響は、これだけではない。</u> <**EX^1：例証 (EX^1- EX^{4}まで)-後述の TS**>たとえば、ひと組の夫婦がいるとする。 <**EX^2：詳述-EX^1**>夫は喫煙者で、妻は非喫煙者だ。 <**EX^3：詳述-EX^2**>彼らはレストランにいて、夫はタバコを吸っている。 <**EX^4：詳述-EX^3**>もちろん、彼はタバコから有害な物質を受け取っているのだが、実は妻のほうも受け取っているのだ。 <**TS：主張・詳述-TRS**><u>これはつまり、喫煙は、喫煙者自身だけではなく非喫煙者にも影響を与えるということである。</u> <**EX^5：言い換え- TS**>このことは受動喫煙と呼ばれ、公共空間における喫煙の問題とともに社会問題になりつつある。

(Table 9-4. continued)

	English original	Japanese version
	<EX[7]: reason to EX[6]> It is because, non smoker can get more harmful substances than smoker. **<?-?>** Specialists say that they have cancer-causing property. (continues to P3 for concluding paragraph)	<**EX[6]：理由- TS**>それはなぜなら、非喫煙者のほうが喫煙者よりも有害な物質を受け取っているからだ。 <**EX[7]：追加- EX[6]**>専門家は、この有害物質には発がん性があるとも指摘している。 (以下 P3 省略)

The writer of this essay agreed with the statement, which is *"Smoking should be banned in public places,"* in the THS because of the *"bad effects of smoking."* In order to explain the bad effects, a cancer-causing substance, nicotine, was introduced in the third sentence (EX[1]); however, instead of further elaborating on the relation between nicotine and cancer, *"nicotine dependence (addiction)"* was discussed and the results of addiction were further elaborated in the subsequent sentences. This is an apparent logical break, confusing the reader about the main idea of the paragraph. As already discussed in **7.2.1**, this essay also has a structural problem, with the THS located at the beginning of the essay, making the introductory paragraph disproportionally long. Sometimes, students tend to put more than one idea in one paragraph. This shows that L-group students are not knowledgeable about proper paragraphing (i.e., sorting ideas logically in a paragraph structure).

Another possible interpretation of the problem is the inductive reasoning found in the second paragraph, which was the main cause of logical anomalies found in the English essays. The main idea in the second paragraph could be *"the bad effect of second-hand smoking"* stated in the fifth and sixth sentences (EX[5] and EX[6]). Therefore, this idea should be placed in the second sentence of the second paragraph after TRS

(transitional sentence) as a TS in the English essay. For example, the second paragraph can start with "*The effect of smoking is not limited to the health damages to the smoker himself. Smoking causes serious health damages to non-smokers as well in the form of second-hand smoking.*" Then, the *example* or *elaboration* of second-hand smoking can follow in order to support the TS.

The Japanese version of the Table 9-4 essay, on the other hand, does not show any apparent logical anomalies. It is fully tagged with both SF tags and RST tags. The sentences from EX^1 to EX^4 all function as *elaboration* to the TS, which is the sixth sentence in this paragraph. This sixth sentence is both the main idea of the second paragraph and *elaboration* of the TRS. Japanese essays often start with an example that makes readers think about what the writer is going to discuss, and the example is expected such that it should be effective enough to arouse the readers' empathy with the writer's opinion written later. This Japanese organizational style is used in the English version of this essay, and here is another L1 negative transfer of Japanese rhetorical organization.

Another example of L1 negative transfer of Japanese rhetorical organization, similar to the example in Table 9-3, is that this writer could have clearly presented the topic of discussion in the form of an *organizer* at the end of the first paragraph and discussed the topic of nicotine as a cancer-causing substance in a separate paragraph or the second paragraph to be more precise. Then, *the bad effects of second-hand smoking should have been discussed in a separate third paragraph.*

One further example of rhetorical anomalies that can be ascribed to the Japanese logical organization was *tautology* in the essay quoted in Table 9-5. *Tautology* means that the same ideas are repeated in order to emphasize the writer's opinion, and this is

regarded as rhetorically effective in Japanese (Tomioka, 2003). The writer's main idea in this essay is 勉強を優先すべきだ (*Studying should be given priority over part-time jobs*), and this message is written repeatedly in the sentences including 「アルバイトは副業だ」 (*part-time jobs are a side business*),「（大学生の）本業は勉強だ」 (*a college student's main duty is studying*), and 「大学生は他のことよりも勉強を優先するべきである」 (*studying should take precedence over everything*) underlined in the text in Table 9-5.

Table 9-5.

Excerpt of an Essay Written by L-group Student (Topic 12, L-4)

	English original	Japanese version
P1	**<INT¹: background>** There is a lot of working college students in Japan, because most of them want to earn money. [sic] **<INT²: elaboration to INT¹>** Part-time jobs give them an opportunity to know society. **<INT³: contrast to INT²>** But we should not forget that part-time jobs are a side business. <THS¹> We should remember that college student's main duty is studying. <THS²: condition to THS¹> College students may work only if they have enough time to spare.	**<INT¹:背景>**日本ではお金を稼ぐことが目的で、多くの大学生が働いている。 **<INT²:追加- INT¹>**アルバイトは学生に社会を知るための機会を提供している。 **<INT³:問題提起- INT²>**しかし私たちはアルバイトが副業だということを忘れてはならない。 **<THS¹:主張>**私たちは本業が勉強だということを考えるべきである。 **<THS²:主張>**大学生は本業に十分な時間がなければ働かないほうがよい。
P2	**<TS: NLOG>** Nowadays, part-time jobs have been given priority over studying for many college students. **<EX¹: NLOG>** This idea will make colleges no meaning, because they are a place to study. **<EX²: NLOG>** Moreover, if a college is not a place to study, it will only be a place where students gather. **<EX³: NLOG>** And the worst is that college students lose the reasons of being college students. **<EX⁴: NLOG>** So college students must think that studying should take precedence over everything. (continues to P3 and P4)	**<TS:問題提起-THS>**今日、大学生にとって勉強よりもアルバイトが優先されるようになってきた。 **<SS:影響-TS>**この考えは大学は勉強をするための場所なので、大学に何も意味がないとしてしまうだろう。 **<EX¹:強調-SS>**さらに大学が勉強をするための場所でなければ大学は生徒がただ集まるだけの場所と思われても仕方がない。 **<EX²:追加- EX¹>**最も悪いことは大学生が大学に入った意味がなくなることである。 **<CS:結果- EX²>**そのため大学生は他のことよりも勉強を優先するべきである。 (以下 P3 と P4 省略)

Although this rhetoric is often considered as non-productive in the English essays, repetition of the main idea is not unusual in Japanese essays as an emphatic rhetorical device (Tomioka, 2003).

Another immediate cause of logical breaks in the second paragraph is also "inappropriate TS," whose information as a main idea of the paragraph is either incomplete or inappropriate. Although the writer insisted in the THS[1] that students should study rather than work, the writer should have stated clearly in the first sentence of the second paragraph that "*Studying should be given priority over part-time job*" as the TS of this paragraph. In addition, the following sentences from EX[1] to EX[4] should have directly supported the TS. Instead, writer's statements from EX[1] to EX[3] as 「大学は勉強するための場所でなければ何も意味がない」(*"if the college is not a place for students to study, it does not have a meaning."*) are considered to be illogically to the TS, thus producing an unproductive argument in English.

Thus far, irrelevant ideas and poor organization found in the English essays written by L-group students have been discussed. In many cases, these essays' TSs were not clear and were not directly related to the writer's main claim. There was often neither a THS nor an ORG in the last part of the introductory paragraph, which explained why the writer did not know how to begin the next paragraph or end up using an "inappropriate TS." The difficulty of an appropriate TS has been reported in Maghfiroh (2013) and Wikborg (1985, 1990) as an *unspecified topic.* This refers to either a too specific or too broad of a topic sentence, with which readers are unable to understand the focus of the argument in a paragraph. Therefore, it is safe to say that "inappropriate TS" might be a common feature among the EFL learners.

The problem caused by inductive organization was also found in L-group essays. The main idea was often placed in the middle or at the end of the paragraph (Miura, 2009). Although inductive organization was not always evaluated negatively (Kubota, 1998), the influence of the writer's L1 (Japanese) thought pattern, in this study, was regarded as illogical by native English proofreaders/evaluators (explained in **6.3**).

Another important point is that although there is a TS, it is often followed immediately by EXs. This means that the paragraph has no SSs or supporting sentences. As it was found in the SF analysis in Table 7-2, half of the body paragraphs of L-group essays had Pattern 1 (**TS**-EX^{1-n}). This suggests that students do not have a clear understanding of how to support their main ideas; that is, how to connect ideas logically using concrete examples or other evidence to support their main ideas/claims. The paragraph structured only with TS and EXs suggests that the discussion tends to be shallow and digresses from the main topic. It is clear that L-group students need to learn how to organize their ideas in the form of a standard *paragraph*.

In the case of L-group essays, in particular, the high proportion of *incomprehensible sentences* (see Table 9-2) can hardly be dismissed. Due to the excess of sentences with serious grammatical and syntactic errors as well as incorrect choice of vocabulary, many L-group essays were barely comprehensible. Their serious lack of linguistic ability could be one of the most critical reasons for serious logical anomalies. Because L-group students need to learn how to write logically within the standards of an English essay and paragraph writing framework, thus improving their basic ability of English should be prioritized.

9.4 Irrelevant Ideas and Topic Shift Identified in G-groups

Although few in number, logical breaks due to *irrelevant ideas* were also found in the G-groups, particularly in G2 (see Table 9-2). The reason for this can be found in the negative L1 transfer of inductive organization found in a comparison between English essays and Japanese counterparts. In the sample essay quoted in Table 9-6, the main claim (TS) of the fourth paragraph (P4) is presented in the final sentence: *"As smoking advertisements is prohibited in many public places, smoking in public places should also be banned."*

Table 9-6.

Excerpt of an Essay Written by G1 Student (Topic 13, G1-10)

		English original.	Japanese version
P4		<**TRS**> There is another problem. <**?：NLOG**＞In public places, there should be the underaged, and some of them may admire smokers. <**SS: problem**> Smoking became popular because movie stars in the past smoke, and it made people want to smoke as well. <**EX¹: contrast to SS**> However, smoking is not welcomed nowadays, so we do not have time to watch the scene those days. <**EX²: elaboration to SS**> Smoking by adults in public places may play the same role as the movie stars in the past. <**EX³: elaboration to EX²**> Smoking can be said that it is one of the most typical images of being an adult. <**EX⁴: effect from EX³**> Some young people may smoke because of this image. <**EX⁵: problem to EX⁴**> Its side effects are worse for young people. <**?**> <u>As smoking advertisements is prohibited in many public places, smoking in public places should also be banned.</u> (continues to P5, concluding paragraph)	<**TRS**>まだ問題はある。 <**SS¹: 背景 or 仮定条件-後述の TS**>公共の場にはおそらく未成年がいるだろう。 <**EX¹: 問題-SS**>そして、彼らが喫煙者に憧れてしまう可能性があることだ。 <**EX²: 理由- EX¹**>喫煙は映画俳優が煙草を吸っていたことで一躍人気になった。 <**EX³: 対比- EX²**>しかしながら、最近はあまり喫煙はよしとされていないので、あまりそのようなシーンが扱われることはない。 <**SS²: 正当化-後述の TS**>公共の場における大人の喫煙が映画俳優と同じような役割を果たしかねない。 <**EX¹: 理由- SS²**>喫煙は大人であることを想像させる最も象徴的な行動であるといっても過言でない。 <**EX²: 追加- EX¹**>若者はそのイメージのために吸いかねない。 <**EX³: 影響- EX²**>しかしながら、若年者に対する副作用は大人へのそれよりも大きい。 <**TS**><u>たばこの広告が多くの公共の場で禁止されているように、喫煙自体も禁止されるべきだ。</u>(P5 に続く)

This sentence should be placed at the beginning of the paragraph, in this case, after the TRS. Otherwise, the structure of this paragraph is not considered logical from the viewpoint of English essay writing.

Another example of *irrelevant ideas* characteristic to G-group essays was found in the concluding paragraph, often in the form of a *concession* statement, which is inserted abruptly at the end of an essay. This appears to reflect the *face-saving strategy*, whereby the writer shows understanding of the opposite idea—a typical Japanese attitude (Oi & Kamimura, 1996). However, from the perspective of NSEs, this sudden statement of *concession* is considered to be the case of an *irrelevant idea* or *sudden topic shift*.

In the essay quoted in Table 9-7, "*the rights of smokers/non-smokers*" have not been discussed in the previous paragraphs but are suddenly mentioned in the fourth paragraph (P4), which is the concluding paragraph. In Table 9-8, the third sentence "*Of course, I know smokers also have the right to enjoy tobacco*" is a concession statement but is considered a new topic abruptly inserted in the last paragraph of the essay; thus, it is regarded as a logical break from the viewpoint of an English essay. The rebuttal or the opposite opinion/idea at the very end is considered as a rhetorical feature of Japanese (Oi, 1984; Oi & Kamimura, 1996; Tomioka, 2003). In Japanese, the writer does not insist upon his or her opinion directly, but shows understanding of both sides of the argument with respect to the controversial issue (Oi & Kamimura, 1996). In English, however, the writer is expected to make his/her position clear and remain faithful to that position throughout the essay.

Table 9-7.

Excerpt of an Essay Written by G1 Student (Topic 13, G1-10)

	English original	Japanese version
P4	**<RTHS[1]>** On the above, three reasons why public smoking should be prohibited were pointed out. [sic] **<RTHS[2]>** It is bad for all people around them and can cause disaster. [sic] **<EX[1]: NLOG>** People have the right to smoke, but they also have the right not to smoke. **<EX[2]: consequence to RTHS>** Smoke can be spread widely and difficult to control. **<CS: restatement to THS>** Therefore, it should be banned at the first hand. [sic]	**<RTHS：(主張の)繰り返し-THS>**以上、公共の場での喫煙が禁止されるべき理由を三点挙げた。 **<SS[1]：理由-RTHS>**その悪い影響力と、災害を起こしかねないという理由からである。 **< SS[2]：正当化-THS>**喫煙をする権利があると同時に、喫煙をしないという権利があることが理解されねばならない。 **<RTHS：主張の繰り返し-THS>**煙は広範囲に広がるし、それを完全に制御することは難しい。 **<RTHS：主張の繰り返し-THS>**ゆえに、最初から吸うことを禁止するべきである。

Table 9-8.

Excerpt of an Essay Written by G1 Student (Topic 13, G1-6)

	English original	Japanese version
P4	**<RTHS[1]: restatement to THS[1]>** For these reasons, I believe that it is the most efficient way to ban smoking completely to keep good atmosphere for all customers. **<RTHS[2]: restatement to THS[3]>** People have the right to avoid harmful chemicals for their health and to enjoy delicious food. **<EX[1]: NLOG>** Of course, I know smokers also have the right to enjoy tobacco, but restaurants are closed places. **<EX[2]: result from EX[1]>** So, smokers should not smoke in restaurants. **<CS: interpretation from RTHS[1]>** I believe that they should smoke in places where people who do not smoke can escape from smoke.	**<RTHS：(主張の)繰り返し-THS>**これらの理由から、私は喫煙を完全に禁止してしまうことが、すべての客にとって良い空間を保つために最も効果的な方法であると考える。 **<SS：(主張の)強調-SS in P1>**人々は有害物質から自らを守る権利を持っているのだ。 **<EX：譲歩-SS>**もちろん、喫煙者にも煙草を吸う権利はあるが、レストランは密閉された空間であり、非喫煙者にはなす術がないため、レストランにおいては喫煙者が煙草を吸わないべきだろう。 **<CS：結論-RTHS>**喫煙者は非喫煙者が煙から逃げることのできる場所で煙草を吸うべきだ。

The next feature of logical anomalies is a *sudden shift of topic*. In the sample essay quoted in Table 9-9, the main reason for a ban on smoking in the THS (P1) is the negative effect of second-hand smoking, which is discussed further in the second paragraph (P2). However, the topic is changed to *the manners of smokers* in the last sentence of P2. The writer then concludes in P3 that smokers should reflect on their manners, which conflicts with the main idea in the THS, "*I believe that people should not smoke in public places because of secondary smoking.*" The reason for the logical shift or *unjust change of a topic* (Wikborg, 1990) among the G-group students could be attributed to their improvisational decision-making while writing (Sasaki, 2000). Relatively skilled writers like G-group students may have had an initial global planning, but changed the course of their argument while writing.

Table 9-9.

Excerpt of an Essay Written by G2 Student (Topic 13, G2-1)

	English original	Japanese version
P1	**<INT>** We sometimes see people smoking in public places such as restaurants. **<THS>** I believe that people should not smoke in public places because of secondary smoking.	**<INT>**レストランなどの公共の場所で喫煙者を見かけることがある。 **<THS>**私は受動喫煙が理由で、公共の場でたばこを吸うのは良くないと信じている。
P2	**<SS>** It is said that smoke contains a lot of unhealthy substances. **<EX¹>** This is the reason of lung cancer. [sic] **<TS>** However, it is also said that secondary smokers are affected more than smokers. [sic] **<EX¹>** This means even non smokers are not safe; they are more affected by unhealthy substances than people who smoke. **<SS>** The worst thing is that non smokers cannot avoid smokers in public places. **<EX¹>** As for me, I used to work at a restaurant with smoking areas as a waitress.	**<SS>**たばこの煙には多くの健康に害のある成分が含まれていると言われている。 **<EX¹>**これが肺ガンの原因である。 **<TS>**しかし、受動喫煙は喫煙者よりも影響を受けているとも言われている。 **<EX¹>**これはたばこを吸わない人は安全でなく、より健康に害のある成分に影響をより受けているという意味である。 **<SS>**最悪なことには、たばこを吸わない人は喫煙者を公共の場で避けられない。 **<EX¹>**私はウエイトレスとして、喫煙席のあるレストランで働いていたことがある。

(Table 9-9. continues)

(Table 9-9. continued)

	English original	Japanese version
P2	**<EX²>** I always felt that smoking areas smell really bad. **<EX³>** Also, when I went to smoking areas to take orders, the customers did not stop smoking even though I was standing by their table to take orders. **<EX⁴>** Because of smoke, it was really hard not to keep coughing. **<EX⁵>** However smokers did not even think that their smoke made other people hard to breath. **<EX⁶>** <u>This is the matter of manners.</u>	**<EX²>**私はたばこのにおいが臭いといつも感じていた。 **<EX³>**また、私が喫煙席に行ってオーダーを取るのにそばに立っていても、お客さんはたばこを吸うのをやめようとしない。 **<EX⁴>**たばこの匂いで私は咳き込まずにはいられませんでした。 **<EX⁵>**それでもたばこを吸う人たちは私達が息を吸うのが辛いと思うことさえない。 **<SS>**これはマナーの問題だ。
P3	**<RTHS>** For this reason, I strongly believe that smoking should be banned at all restaurants. **<EX¹>** Maybe smokers will say people should respect smokers' right, but it is not true. [sic] **<EX²-✕>** <u>I think the reason why the non smoking movement has been promoted is because of bad manners of smokers, such as smoking while walking.</u> **<EX³>** <u>I know it is difficult to stop smoking but if smokers keep good manners, the movement for non smoking will become more moderate than it is now.</u> **<CS>** <u>Until smokers' manners are improved, all restaurants should ban smoking.</u>	**<RTHS>**この理由で私は全てのレストランは禁煙にすべきだと信じている。 **<EX¹>**喫煙者はたばこを吸う権利があると言うかもしれないが、これは正しくはない。 **<EX²>**私は喫煙運動が盛んになったのは、歩きたばこなどの喫煙者の悪いマナーのせいだと思う。 **<EX³>**たばこを吸うのを止めるのは難しいとは分かっているが、もし喫煙者がマナーを守れば禁煙運動はもっと落ち着くだろう。 **<CS>**喫煙者のマナーが良くなるまでは全てのレストランでたばこを禁止すべきだ。

Thus, their discussions could expand and digress. In order to prevent this, since planning is regarded as an important part of the writing process, students should be encouraged to spend more time on planning ever for the students at a higher English proficiency (Ellis & Yuan, 2004; Kellog, 1990; Ojima, 2006).

9.5 Discussion for Study 3

In this section, analysis of the rhetorical anomalies where valid RST tags could not be assigned was conducted and the findings are discussed in order to answer Research Question 2 shown below.

RQ2. Are there any noticeable rhetorical anomalies identified in students' English essays? If so, what are the reasons for these anomalies?

Noticeable rhetorical anomalies have been found in students' essays in Study 3. The main reasons for logical anomalies include *irrelevant ideas*, *incomprehensible sentences,* and *sudden topic shift*. Most were observed in the essays written by L-group students, whose essays were full of *irrelevant ideas* inserted without connection to previously written ideas. This was aggravated by *incomprehensible sentences* with grammatical, syntactic and/or lexical errors. These errors in KUBEC were already investigated by this author (Yamashita, 2016) and L-group students made more serious and frequent errors than G-group students. A serious lack of linguistic ability was one of the reasons of their higher frequency of rhetorical anomalies.

One serious finding was that many of the *irrelevant ideas* happened to be "inappropriate TSs" in body paragraphs, particularly in the second paragraph. "Inappropriate TSs" mean that information as a main idea of the paragraph is either incomplete or inappropriate as to its content, and that information is not correctly placed at the beginning of the paragraph. This is what Wikborg (1985) called *unspecified topic* where the topic sentence is either too specific or too broad. This happens because the THS (thesis statement or main idea) is placed in the beginning of the first paragraph, and

due to the lack of ORG, ideas are disorganized by the end of the first paragraph; thus, the first sentence of the second paragraph often fails to be linked to the THS (main idea) of the essay, resulting in the insertion of *irrelevant ideas*.

Although the TS was given at the beginning of the paragraph, it was often followed by EXs, indicating that the students did not know how to support the main idea in each paragraph particularly in the case of L-group students. There were often more than two ideas discussed in one paragraph. Since *paragraphing* is one feature that Japanese students find difficulty with (Nishigaki & Leishman, 1998, 2001; Taniguchi, 1993), L-group students need to be taught the basics of paragraph writing in English.

Some of the essays written by G-group students also had problems of *irrelevant ideas* and *a sudden topic shift*. The former often occurred in the form of a *concession* inserted abruptly in the concluding paragraph. Showing understanding of the opposite idea is considered to be a typical Japanese rhetoric (Oi, 1984); however, a *concession* statement at the very end of the essay is regarded as an apparent logical break in an English essay. In order to reduce this problem, G-group students should be noticed influence of L1 in their essays; otherwise, they might know them. Another case of a *sudden topic shift* (see Table 9-9) found among G-groups may be ascribed to the lack of planning or their improvisational decision-making while writing (Sasaki, 2000). In this case, they can prevent it by taking time to prepare an essay outline to ensure their essays do not digress illogically.

One clear reason for these anomalies was L1 negative transfer, specifically the use of *inductive reasoning*, which is often used in Japanese essays, in their English essays regardless of their proficiency levels. In this style, the main idea is not placed at the beginning of a paragraph but often placed much later on (Miura, 2009). The logical

organization is not linear and those cases are, as a result, often regarded as a logical break in English essays. Another feature of L1 transfer is *tautology*, which is when the same ideas are repeatedly stated, was also found in L-group essays. This is sometimes considered effective in Japanese essays; however, it was regarded as redundant in English essays (Tomioka, 2003). In this study, a comparison between L2 essays and their L1 counterparts found cases of negative transfer of L1. When students tried to write their English essays with Japanese writing conventions, NSEs considered that those essays logically collapse.

L-group students, in particular, who lacked L2 composition education and experience in L2 writing could have inevitably resorted to the L1 writing conventions (e.g., *saku-bun, ki-sho-ten-tetsu*) that they learned in the past. Hirose (2005) stated that past writing instruction in either L1 and L2 can affect a writer's choice of L2 organizational patterns. Rinnert and Kobayashi (2007) found in their study that when novice writers did not receive any L1/L2 academic writing training tended to write their essays in the style of *saku-bun* (e.g., *kanso-bun*) Japanese students are familiar with. *Saku-bun* is not always expected to be written logically, and straightforward expression of personal feelings and emotions is encouraged (Hirose, 2005; Watanabe, 2017). The researchers (2007) argued that unless the knowledge of L2 writing is taught, writers are unlikely to employ the specific features of L2. Thus, students need to learn/train how to construct their ideas within the frame of an English essay, not a Japanese essay (*saku-bun*) when they write English essays. The assumption of a high dependence on the L1 writing convention, however, needs to be considered carefully. Regarding this, future study (e.g., interview to the students) is necessary (see **10.1**).

One more L1 negative transfer could be dependence on the *reader's inference*. In Japanese, the writer expresses what he/she feels, and the readers are responsible for "reading" the writer's intended meaning (Naotsuka, 1980; Okabe, 1993; Tomioka, 2003). In English, on the other hand, the writer needs to explicitly explain his or her intended meaning. According to Hall (1976), English-speaking countries have a high-context culture, wherein messages need to be conveyed explicitly, while the Japanese have a low-context culture, wherein messages are often expressed implicitly. Factors such as topic shift, vagueness, organization of ideas without a clear linkage, and lack of explanation that are found in Japanese written texts are not necessarily regarded as fatal errors, since the messages can be understood via *inference* from the context (Tomioka, 2003). In English texts, however, these factors are regarded as inappropriate or illogical. English essays written by L-group students were especially prone to these problems. These students need to learn to express themselves explicitly in English with their target readers in mind.

While it is acceptable for their Japanese essays to contain some ambiguity or redundancy in terms of content, they need to refer to their Japanese essays and re-construct the ideas in their English essays so as to convey exactly what they intend to say. In other words, when learning an L2, learners need to be aware of the differences between their L1 and L2 in terms of logical frame, and need to acquire mediation ability[3] or the ability to negotiate "meaning" between the two languages. In this sense, while gaining an appropriate feedback from instructors, writing in both L1 and L2 is meaningful in terms of nurturing the mediation ability. By writing bilingually in G-classes, some students stated that L1 writing was a useful way to review their English

essays and *vice versa*.[4] The pedagogical implication of writing bilingually is another topic for discussion in future studies.

9.6 Summary of Study 3

In this chapter, this author attempted to identify the nature of rhetorical anomalies, if not errors, and the reasons behind them. The sentences tagged with *NLOG* in students' English essays were examined, and found eight types of logical anomalies in the taxonomies created from the previous findings (Maghfiroh, 2013; Skoufaki, 2009; Wikborg, 1985, 1990) were found. Among these anomalies, three major anomalies, *irrelevant ideas* (no connection to previous sentence(s)), *incomprehensible sentences,* and *sudden topic shift*, were identified, and most of them were observed in the essays written by L-group students. In fact, *incomprehensible sentences* were the major source of anomalies in L-group essays.

One of the findings of *irrelevant ideas* was "inappropriate TS" in body paragraphs, especially in the second paragraph. "Inappropriate TS" is when information as a main idea of the paragraph was incomplete and that information was not correctly placed at the beginning of the paragraph. Thus, the first sentence of the second paragraph often failed to be linked to the main idea (THS) of the essay, because *irrelevant ideas* were inserted.

Another possible reason for rhetorical anomalies was L1 negative transfers or the use of a Japanese style of "inductive reasoning" in English essays. This was found when English essays and their Japanese counterparts both written by the same students were compared. Instead of being placed at the beginning of a paragraph, the main idea is often much later on. *Tautology*, in which the same opinions are repeatedly stated, was also found in L-group essays. These rhetorical anomalies found in students' English essays

can be ascribed to the dependence on *reader's inference,* which was often used in Japanese *saku-bun,* where the writer expresses what he or she feels and expects the reader to "read" the writer's intended meaning (Tomioka, 2003).

This study has showed the differences between the essays written by G-group and L-group students. Compared to G-group students who learned the basics of academic writing in the first year at Kansai University, and experienced intensive writing training in the Study Abroad program in the following year, L-group students certainly lacked in both L2 writing experiences and L2 writing instruction. The results of the current study have underscored the importance of teaching *"paragraph structure"* with TS, SSs and CS. The necessity of teaching "paragraph writing" has also been pointed out.

In addition, the results of this study have shown that L1 transfer is still an influential factor to L2 writing, since *"inductive reasoning"* of the Japanese style of organization were often found. L-group students who did not received a proper L2 writing education in the past might have resorted to the knowledge of L1 composition, more specifically, L1 writing convention (e.g., *ki-sho-ten-tetsu, saku-bun*) (Hirose, 2005; Rinnert & Kobayashi, 2007). Students should be aware of the existence of the different conventions between English and Japanese, and need to be properly trained to write using the appropriate style of rhetorical organization.

Notes

1. This classification of rhetorical anomalies was created by the third researcher (see **6.3**) and this author. The taxonomies used in the previous studies (Maghfiroh, 2013; Skoufaki, 2009; Wikborg, 1985, 1990) were referred.

2. The Japanese essays discussed in this section are not necessarily "good" essays; however, Japanese researchers (see **6.3**) considered these essays not to be illogical because both SF and RST tags were assigned in the sentences. Grammar and vocabulary use are not taken into account for analysis.

3. The idea of "mediation ability" was first included in Common European Framework of Reference for Language (CEFR) and this study interprets this term as "negotiation of meaning between different languages."

4. Some of the students in G-group gave us positive comments about writing bilingually. Their comments include "When I was writing in Japanese, I was able to rethink what I intended to say in English," or "I found that writing Japanese essays in a frame of English paragraphs could be possible, and I was able to write more logical essays in Japanese."

10. Conclusions

10.1 Limitations of This Study

Before summarizing the major findings, this author acknowledges some limitations of this study. Firstly, while the overall features of rhetorical organization of the essays written by the students at three different proficiency levels were identified, the number of samples analyzed was limited. More samples from KUBEC versions 2012 to 2014 need to be examined. In addition, it may not be possible to generalize the results solely from the analysis of KUBEC students without comparing them with those from essays written by students with more background varieties. In this regard, several researchers from other universities joined the KUBEC projects in 2014, and since then, they have been collecting essays under the same scheme. Analyses of these essays and comparison of the results with those from KUBEC can provide us with more features common among Japanese students' essays. Since the purpose of this current study was to identify the representative patterns of logical organization or logical anomalies in students' essays, individual essays were not fully examined. With limited samples, a qualitative analysis on each of the essays might have been possible, which is a future consideration.

Moreover, a comparison with essays written by students with different nationalities as well as native English speakers might offer us the answer to the question if the results of this current study were specific to the Japanese students' essays. If the same features were found regardless of nationalities, not L1 (Japanese) transfer but students' educational background about writing training or their preference or beliefs about rhetorical organization might have been more influential factors. In any case, this author believes that comparison with students with different background varieties will provide

us with valuable findings that can contribute to the teaching of L2 (English) writing in Japan.

Secondly, a comparison between G1 and G2 by English proficiency levels did not yield any different features. Students in G-group were divided into two subgroups, G1 and G2, based on their TOEFL scores. However, some of the students in G1 could have been assigned to G2 or *vice versa* because their TOEFL scores were on the border line of the group division, so they could have been placed in either group. If the author had chosen the students to represent each group considering the distribution based on the standard deviation, she might have obtained results that highlighted the proficiency difference more clearly.

Thirdly, the author often attributed some features of G-group texts, in particular, to the education those students received in the Study Abroad program; however, they may also have learned how to write English essays in college English classes including "English Writing I," and "English Writing II," in which the essays were collected, or even before they were enrolled in Kansai University. There might have been a strong influence of what they learned during their "English Writing II" class on the results of this current study. Writing experience in both L1 and L2 also need to be investigated among the G- and L-group students. An in-depth investigation into the Review Comments (see **4.2.1**) or structural questionnaire surveys as well as interviews about what students learned from these classes over the years and before university enrollment should have been conducted in order to fully examine the results which the current study identified.

Fourthly, the current study only examined the students' writing products, while their *process* of writing was not investigated. Studies that focus on writers' cognitive

processes of writing have been widely conducted (Cumming, 1989, 1990; Raimes, 1985; Sasaki, 2000, 2002; Swain & Lapkin, 1995; Victori, 1999; Yamashita, 2013; Zimmerman, 2000), and they have clarified strategic differences between the skilled and non-skilled writers. The rhetorical features identified in the current study need to be re-examined from the viewpoint of how students wrote their essays. Investigation into their writing process using the video capture data (see Note 7 in Chapter 4) could have revealed the associations between the learner variables and the products which the current study investigated.

Another limitation is related to the methods and procedures of analysis. Four analytical frameworks need to be further reconsidered. Although this author looked at the conditions under which an English text is logically organized, other analytical frameworks might have been possible. For example, Text Mining could have been a strong alternative to the Keywords-Chain Analysis. An excessive use of metadiscourse markers (such as *and, but, however, therefore*) among the learners of English (Narita & Sugiura, 2006, and others) also needed to be taken into consideration.

In addition, even though the viability of analytical frames that the author has proposed has been confirmed in the main studies, further refinement of these analytical tools is necessary. For larger samples, RST analysis should have been selected, focusing only on a few relations; otherwise, the process of analysis could have been too tedious and complicated. The subjectivity of RST analysis also needs to be re-considered, even though we conducted a thorough discussion to reach an agreement in assigning tags whose interpretation differed among the taggers.

The last limitation is that there might be L2 (English) influence to Japanese essays due to the "English-first-and-then-Japanese" order. Students were instructed not to

"translate" from English to Japanese but rather to try to write naturally as if they were writing an essay in Japanese. Some of the essays that were considered a direct translation were excluded from the investigation. Nevertheless, the author has acknowledged that L2 transfer could not be completely avoided.

10.2 Summary of Major Finings

Under the two RQs presented in Chapter 3, the rhetorical organization of the English argumentative essays written by KUBEC students was first investigated, using the four analytical frameworks the author proposed. The frameworks include 1) Structural-Functional (SF) Analysis, 2) Rhetorical Structure Theory (RST), 3) Metadiscourse Markers (MDM) Mapping, and 4) Keywords-Chain Analysis.

SF Analysis looks at structural and functional components of a given essay as well as their sequence. With this analysis, whether or not the paragraphs of a given essay are logically organized can be established. RST is a theory of text organization first developed by Mann and Thompson (1988). This part of the analysis examined, with a visual presentation of text organization, the rhetorical relations of adjacent sentences based on 30 RST relations the author had chosen. Keywords-Chain Analysis focuses on topical/thematic coherence (Hymes, 1974), and two types of keywords were investigated; theme-setting keywords (TKs) and argument-setting keywords (AKs). The former is related to the given theme of an essay (i.e. the one chosen by the writer) and the latter is related to the arguments developed under the theme. These keywords were manually connected with lines, creating a "keywords-chain." A well-connected chain of keywords can be a good indicator of coherence in a text. In MDM Mapping, the use and distribution of metadiscourse markers (Hyland, 2005) was examined. A pilot study was

first conducted in order to test the viability of these frameworks, followed by the main analysis conducted with a larger number of essays.

The most important finding in this study is the patterns of rhetorical organization specific to each of the introduction, body, and concluding paragraphs, which differed depending on students' English proficiency levels. Most G-group students tried to organize their ideas in the fixed structure of a five-paragraph form (Oshima & Hougue, 2006; Someya, 1994). An introductory paragraph often began with background information (INT), and ended with the thesis statement (THS) and the organizer (ORG) to direct the course of argument. In the body paragraphs, three major organization patterns were identified: [*reason - elaboration/example*], [*problem/reason –result/ elaboration/ solution*], and [*reason/problem –(CS) result/restatement/conclusion*]. The *contrast* relation was often found to make the argument more persuasive, using such MDMs as "however" to mark contrasting ideas. The concluding paragraphs typically began with a *reiteration* of the thesis statement; however, even among students at a higher level of English proficiency, producing an effective ending seemed to have been difficult.

On the other hand, the essays written by L-group students were characterized by an introductory paragraph starting with a THS, followed by *elaboration* relations with EXs. ORG was rarely found at the end of the introduction. Half of their body paragraphs featured EXs or SSs before TS, or either TS only or no TS, which presented distinct difference from those of G-group. Six essays left unfinished due to students' low L2 proficiency and time-limitation. The higher proportion of *unknown* SF tags and *NLOG* (i.e., *not logical*) tags in L-group compared to G1 and G2 can be attributed to this rhetorical organization, which resulted in large numbers of rhetorical anomalies.

The Keywords-Chain Analysis has demonstrated significant findings in terms of the position of both TKs and AKs. In a good essay often found in G-group essays, TKs appeared in the introductory paragraph to indicate the main topic of the essay, and were used repeatedly across the body paragraphs through to the conclusion. The AKs usually appeared in the THS or ORG in the final part of the introductory paragraph to set the direction of the entire essay, and reappeared in the TS of each body paragraph. The chain of keywords was thus well-connected from the first to the concluding paragraphs. Relatively poorly structured essays mostly found in L-group essays, on the other hand, contained a limited number of keywords, and they were rather sporadically placed throughout the entire essay. In addition, keywords that appeared in the middle of the essay tended to be logically collapsed because of a shift of topic.

The MDMs used in G-group essays included *transition markers* (i.e., *and, however, therefore, moreover*), *sequencing markers* (i.e., *first, second, finally*), and *code glosses* (i.e., *for example, in conclusion, mean, in fact, especially*). A wider variety of these metadiscourse markers was used to show the layers of discussion and to attain both global and local cohesion, while L-group essays contained limited numbers of such MDMs as *and, but,* and *so* in the sentence-initial position, to indicate that discussion was not fully developed. The interesting aspect of this phenomenon is that a mere glance at the sequence of transition markers can help to grasp the logical flow of the argument. In addition, MDMs and keywords often complement each other to create cohesion in a text.

The analysis for RQ2 in this study was carried out to identify the nature of rhetorical anomalies and the reasons behind them. The author examined the sentences tagged with *NLOG* in students' English essays and found eight types of logical anomalies in the taxonomies created from the previous studies (Maghfiroh, 2013; Skoufaki, 2009;

Wikborg, 1985, 1990). Among them, three major types of anomalies, *irrelevant ideas* (no connection to previous sentence(s)), *incomprehensible sentences,* and *sudden topic shift,* were identified. Most of them were observed in the essays written by L-group students. In fact, *incomprehensible sentences* were the major source of anomalies in L-group essays.

One reason of *irrelevant ideas* is "inappropriate TS" in body paragraphs, especially in the 2nd paragraph. "Inappropriate TS" means that the information comprising the main idea of the paragraph is incomplete and that the sentence containing that information is not correctly placed at the beginning of the paragraph. This often happens in L-group essays, because THS is placed at the beginning of the 1st paragraph and there is no ORG. Thus, the first sentence of the second paragraph often fails to be linked to the main idea (THS) of the essay, which is regarded as *irrelevant ideas* inserted. This finding is closely connected to the above-mentioned position of keywords. When the SF elements and keywords are appropriately positioned, logical anomalies are avoided.

Another possible reason for rhetorical anomalies is L1 negative transfer or, to be more specific, the use of a Japanese style of "inductive reasoning" in English essays. This was found in comparison of English essays and their Japanese counterparts both written by the same students. Instead of being placed at the beginning of a paragraph, the main idea is often placed much later on. This logical organization was regarded as a logical break by our NSE proofreaders. *Tautology*, in which the same opinions are repeatedly stated, was also found in L-group essays.

The current study has revealed the differences between the essays written by students at different proficiency levels. Previous research on L2 writing (Kamimura, 1996; Kaplan, 1966; Kraples, 1990; Raimes, 1985; Hirose & Sasaki, 1996) has indicated

that the variables influencing the quality of L2 writing include L2 proficiency, L1 ability, composing competence in L1 and L2, and meta-linguistic ability (awareness of the system of language). Among them, L2 proficiency plays a prime role in explaining L2 writing quality (e.g., Carson & Kuehn, 1992; Cumming, 1989; Pennington & So, 1993; Sasaki & Hirose, 1996). Compared to the G-group students who experienced intensive writing training in the Study Abroad program in their second year, along with pre-departure writing training in the first year, L-group students certainly lacked both linguistic and L2 writing ability and L2 writing experience because the results of questionnaire survey showed (see **6.1**) that most of them had never written more than one or two paragraphs of continuous text when they took this writing class. Therefore, the results of the current study have shown that the difficulty of writing an essay among the students who lacked L2 proficiency and L2 writing background, and have underscored the importance of teaching a "paragraph structure," which will be explained in detail in **10.3**.

Although the culture-dependent factor may not be the single most influential factor regarding rhetorical anomalies (Connor, 1996; Kubota, 2004; Matsuda, 1997), the results of this study have shown that L1 transfer is an important factor in students' writing. In this regard, past education of either L1 or L2 writing can have an effect on students' choice of L2 organization (Hirose, 2005; Rinnert & Kobayashi, 2009). Since students wrote essays in English first and then in Japanese, English may have had an influence on their Japanese essays. The results of this study, however, showed that their English essays showed influence of Japanese composition. Students, L-group in particular, were most likely to construct their ideas in Japanese when writing in English (e.g., Wolfersberger, 2003). Under this circumstance, students who have not received a proper

L2 writing education in the past have no other choice but to resort to their knowledge of L1 composition, more specifically, L1 writing convention (e.g., *ki-sho-ten-tetsu, kanso-bun*) (Hirose, 2005; Rinnert & Kobayashi, 2007). This may be the reason why rhetorical anomalies caused by *"inductive reasoning"* of the Japanese style of organization were often found in L-group essays. When writing in English, Japanese students should be taught that while *"inductive reasoning"* can be accepted in their L1 composition, but that this organization style can confuse NSEs who are familiar with linear organization with the most important idea at the beginning of the text. Dependence on *"reader's inference"* could also be the reason of anomalies. In Japanese, writer expresses what he or she feels and expects the reader to "read" the writer's intended meaning (Tomioka, 2003); however, this is also not accepted in writing in English. Students need to learn to express themselves explicitly in English with their target readers in mind. Although students' dependence on L1 writing convention needs further investigation, the current study suggested both L1 and L2 writing education are important.

10.3 Pedagogical Implications

Regarding the rhetorical organization of English texts, this study has revealed characteristic weaknesses in L2 compositions of Japanese EFL students. Grabe and Kaplan (1996) argued that "writing abilities are not naturally acquired; they must be culturally (rather than biologically) transmitted in every generation" (p. 6), putting an emphasis on writing instruction.

Therefore, the first implication is teaching a "paragraph" to the novice writers similar to L-group students. Compared to G-group who represented a special group with

ample L2 writing background, L-group were ordinary Japanese students who had less experience in L2 writing and lacked the basic knowledge of paragraph writing. The necessity of teaching "paragraph writing" has already been pointed out by many researchers teaching Japanese students (Nishigaki & Leishman, 2001; Oi & Tabata, 2012; Taniguchi, 1993). Even though the importance of teaching paragraph writing to the students at the entry-level has been pointed out and acknowledged by many teachers, it can be assumed that it has not been appropriately taught in class (Oi, 2010). However, Oi and Tabata (2012) reported that their students were able to produce better essays that conformed to the basic rules of paragraph writing after being taught paragraph writing step by step in class. Students firstly need to understand the typical paragraph structure; i.e., a good paragraph contains the *topic sentence*, which is backed up by *supporting sentences,* and ends with a *concluding sentence.* In addition, these paragraphs need to be logically connected with appropriate use of transition markers. Being aware of a surface structure of a paragraph is not enough. Assisted by teachers providing feedback, students need to be taught how to write from one paragraph to an essay by fully understanding what constitutes a *good* paragraph.

Being well prepared about what to write in the planning stage of a writing process is also important (Ellis & Yuan, 2004; Kellog, 1990; Ojima, 2006). L2 writing requires a more cognitive load than L1 writing (Schoonen, van Gelderen, & de Glopper, 2003; Tillema, 2012), and less-skilled students take time on local planning such as grammar and vocabulary while writing in L2 (e.g., Raimes, 1985; Sasaki, 2000; Victori, 1999). In order to avoid logical breaks in their essays, students need to learn to organize their ideas logically prior to their writing. Such activities as *brainstorming*, *mapping,* and *listing and outlining* can be useful for generating ideas, sequencing ideas in a list, or outlining them.

During these pre-activities, those with limited English skills should be encouraged to use their L1 to generate ideas, as previous studies (e.g., Lay, 1982; Sasaki, 2002; Wolfersberger, 2003) suggested that L1 use could facilitates the process of thinking and writing in L2.

In order to align their ideas in a logical order, the RST patterns or the Toulmin Model (1958) can become useful tools. The RST patterns, for example, *reason-elaboration/example* or *problem-solution* patterns the author identified in this study can help students arrange their thoughts into these organizational patterns. Regarding the Toulmin Model (1958), the applicability of the model has already been tested in writing classes for junior high school students (Oi, 2005b). In her study, Oi found that students' argumentative essays became more convincing with an addition of "warrants" after they learned the Toulmin Model. She emphasized, however, that a mere exposure to this model is not enough, and it has to be explained step by step, using samples that students are familiar with. Teachers should guide them for discussion, or as Oi did in her study in 2005, students and their peers can discuss about how to connect ideas logically, using the model.

The analytical frameworks adopted in this study can be used by teachers and researchers to check the students' essays. It has been reported that writing teachers are exhausted from checking or giving feedback to the overwhelming amount of students' texts. Ferris and Hedgcock (1998) noted that teacher feedback is considered the largest investment of time and energy, curtailing even the amount of time spent preparing and conducting lessons. The four analytical frameworks the author proposed have been proven to be useful tools for identifying whether an essay is of high quality without reading it thoroughly. With the Structural-Functional Analysis, whether a paragraph is

structurally well-written or not can be examined by simply identifying TS, SS, EX and/or CS. The tagging procedure, as we have already seen in 6.3, is not as cumbersome as it may seem at first glance. With Keywords-Chain Analysis and MDM Mapping, the main topics of discussion and threads of discussions can be followed by the recurrence of keywords, as well as the signposts, for example, *transition markers*. With Rhetorical Structural Analysis, how sentences are logically related, or in particular, rhetorical anomalies can be detected only with NLOG tag.[1]

In addition, this study highlighted the benefits of the bilingual approach in EFL writing classes. Many rhetorical anomalies identified in students' English essays could be attributable to their Japanese writing conventions. This, however, would not have been found without a comparison between the texts written in L1 and L2. Students can be encouraged to notice the difference by comparing the texts written in L1 and L2. Furthermore, when students failed to convey their ideas fully in English, their intended meaning can often be recovered by reading their Japanese texts. Oi (2010) has reiterated the importance of a bilingual approach, after she confirmed success in teaching English rhetorical organization in teaching Japanese essays. In fact, many universities have started to teach paragraph writing similar to English in Japanese academic writing courses (Watanabe, 2017). Tanaka and Abe (2014) introduced English organizational structure into the writing of reports or opinion essays in Japanese. The author believes that there will be more bilingual approaches in both L1 and L2 settings.

10.4 Future Research Directions

The author proposes three future research projects. Firstly, as mentioned in **10.1**, this study only examined Japanese students' essays, and has determined that the

rhetorical organization and anomalies identified were ascribed to L1 transfer and L1 educational background. However, this result cannot be confirmed without looking into the essays written by students of other nationalities, for example, native speakers of English. If the same features were identified, there might be reasons other than L1 transfer (i.e., L1 or/and L2 educational background, preference or beliefs of choice, etc.). Future study can be conducted by comparing the essays written by Japanese students and those with different nationalities. This will offer us more insight into the problems that are common among the students regardless of nationalities, which will be the key for future L2 writing education.

Secondly, the current study only looked at the final product of the students' essays, and did not examine their process of writing. The investigation into writing process will provide valuable insights into cognitive interactions of the writer in creating a text (Zamel, 1982). Numerous studies have already revealed the different strategies employed by skilled and unskilled writers, and different thinking processes or decision-making while composing between the two writers (e.g., Cumming, 1989, 1990). The author proposes to examine the video capture data included in KUBEC (see Note 7 in Chapter 4), since this video data can show the real-time process of text production by each of the G and L-group students. The investigation into these data is expected to provide useful information about how to teach L2 writing to Japanese EFL students, which was not gained solely from end products of writing, in particular, highlighting the differences of the writing processes between the skilled (G-group) and unskilled (L-group) writers.

Finally, this author suggests practical research about teaching L2 writing where teachers in the secondary school and university instructors can cooperate with each other. As in previous research (Kawano & Nagakura, 2017; Oi et al, 2016; Yasuda et al, 2014),

the current study also suggested the lack of L2 writing instruction to the students prior to their entrance to university. Once students are trained to write a paragraph properly in their secondary school, their writing skills can be expanded into the writing of extended essays in university classes. This kind of collaborative instruction can be possible in the affiliated schools where this author currently works for because most of the students in high school go onto the affiliated university. High school teachers and college instructors can work cooperatively on a pilot-study basis to teach their students the writing of a short paragraph to a lengthy essay consisting of several paragraphs across the institutions and examine the quality of students' L2 texts over the years. Amid the growing interests in teaching L2 writing among the teachers and instructors, nurturing students' ability of L2 writing is what both of them are hoping for. This author believes that the linkage of L2 writing instruction both in instruction and research across the secondary and higher institutions is necessary.

Note

1. The on-line annotation system has been developed for the Structural-Functional Analysis and Rhetorical Structure Theory Analysis as one of the KUBEC projects. Even though manual tagging is still needed, the system has facilitated a tagging procedure, and has generated the results of structural tagging automatically, and has graphically presented rhetorical organization.

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Appendices
Appendix 1. Online Consent Form and Questionnaire Survey

同意書

本授業の趣旨について十分な説明を受けた上で、私が授業期間中に作成した英文および和文のエッセイのデータを、本学における教育研究目的のためにデータベース化することに同意します。また、同データの整理のために以下の個人情報を提供することに同意します。ただし、個人情報にかかわる内容については個人情報保護法の趣旨に則り適正に処理されることを条件とします。本データの送信をもって同意の意思表示とします。

アンケート実施責任者：外国語学部教授　染谷泰正

提出日	2013 ▼ 年 4 ▼ 月 1 ▼ 日　※以下、英数字はすべて半角文字で入力してください。
1a. 氏名 (漢字)	
1b. 氏名（ローマ字）	※書式＝TARO Yamada
1c. 学生番号	※例：外00-0000（数字は半角）
1d. 電子メールアドレス	※必須（正確に書くこと）
1d. クラス	select ▼
2. 年齢	select ▼
3. 性別	select ▼
4. 学年	select ▼
5. 所属学部・専攻	
6. 英語学習歴（年数）	select ▼
7. 他の外国語学習歴（言語名／年数） 　* NA＝なし (Not applicable)	select ▼　select ▼　※複数ある場合は主要なものを記入

8. 英語の資格（およそ1年以内のもの）

TOEFL		点　※外国語学部の学生はTOEFLまたはIELTS必須
IELTS		点（0-9）
TOEIC		点
英　検		級
その他		

9a. 英語圏での生活経験（年数）	select ▼　※SA を含みます（SA期間は1年相当として計算）
9b. 英語圏での生活経験（国名）	select ▼　※複数ある場合は主要なものを記入

10. 日頃の英語使用状況　[1=全くない　2=ほとんどない　3=少しある　4=時々ある (Weekly) 5=よくある (Daily)]

10a. 読むこと	select
10b. 書くこと	select
10c. 聴くこと	select
10d. 話すこと	select

11. 日本語でエッセイ書くのは…　[１＝とても苦手　２＝やや苦手　３＝普通　４＝どちらかと言えば得意　５＝とても得意]
select

12. 英語エッセイを書いたことが…　[１＝全くない　２＝ほとんどない　３＝少しある　４＝時々書いている　５＝よく書いている]
select

13. 英語でエッセイを書くのは…　[１＝とても苦手　２＝やや苦手　３＝普通　４＝どちらかと言えば得意　５＝とても得意]
select

14. 上記13の理由を具体的に書いてください。

15. 何かコメントがあれば記入してください。

以上です。必要事項の記入が終わったら以下のボタンをクリックして [内容確認] をしてください。
[リセット] をクリックするすべてのデータが消去または初期化されます。

[内容確認(Review)]　[リセット(Reset)]

(c) 2013 Yasumasa Someya

※この同意書は名古屋大学の NICE (Nagoya Interlanguage Corpus of English) Project で使用された書式に準じています。

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Note. Items in questionnaire survey;

1a: Name (in Chinese characters), 1b: Name (in Roman characters), 1c: Student number, 1d: Mail address, 1e: Class, 2: Age, 3: Gender, 4: Grade in university, 5: Department, 6: Experience of studying English (years), 7: Experience of studying other foreign languages (years), 8: Scores of English proficiency tests (TOEFL, IELTS, TOEIC, Eiken, Others), 9a: Experience of living in English-speaking countries (years or months), 9b: Experience of living in English-speaking countries (name(s) of countries), 10: Frequency of English use at the time of this survey in reading, writing, listening, and speaking, 11: Ability to write essays in Japanese (i.e., Do you think you are good at writing a composition in Japanese?), 12: Experience of writing a composition in English (i.e., Have you ever written a composition in English? If so, how often?), 13: Ability of writing a composition in English (i.e., Do you think you are good at writing a composition in English?), 14: Reasons for response to Q13, 15: Comment

Appendix 2. English Essay Data Collected in 2013

	Essay topics	Groups	English Essays (Original)			English Essays (Revised)		
			No. of essays	No. of words	Avg. No. of words per essay	No. of essays	No. of words	Avg. No. of words per essay
1	Env. pollution	G	150	46,286	308.6	118	39,993	338.9
		L	10	2244	224.4	9	2879	319.9
		Total	160	48,530	303.3	127	42,872	337.6
2	Violence on TV	G	149	45,162	303.1	116	37,221	320.9
		L	9	2145	238.3	9	2653	294.8
		Total	158	47,307	299.4	125	39,874	319.0
3	Young people today	G	147	47,654	324.2	113	39,988	353.9
		L	10	2501	250.1	9	2891	321.2
		Total	157	50,155	319.5	122	42,879	351.5
4	Suicide	G	148	48,131	325.2	117	40,884	349.4
		L	10	2256	225.6	9	2720	302.2
		Total	158	50,387	318.9	126	43,604	346.1
5	Sports	G	144	43,939	305.1	121	40,352	333.5
		L	10	2645	264.5	8	2609	326.1
		Total	154	46,584	302.5	129	42,961	333.0
6	School Education	G	159	52,611	330.9	126	45,351	359.9
		L	10	1798	179.8	9	2794	310.4
		Total	169	54,409	321.9	135	48,145	356.6
7	Recycling	G	153	46,169	301.8	116	38,514	332.0
		L	11	2498	227.1	10	3181	318.1
		Total	164	48,667	296.8	126	41,695	330.9
8	Money	G	153	50,412	329.5	117	40,739	348.2
		L	9	2377	264.1	9	2968	329.8
		Total	162	52,789	325.9	126	43,707	346.9
9	Divorce	G	146	49,229	337.2	126	44,135	350.3
		L	10	2326	232.6	9	2748	305.3
		Total	156	51,555	330.5	135	46,883	347.3
10	Death Penalty	G	157	49,638	316.2	133	45,203	339.9
		L	10	2403	240.3	8	2468	308.5
		Total	167	52,041	311.6	141	47,671	338.1
11	Crime	G	149	47,186	316.7	127	44,390	349.5
		L	9	2254	250.4	10	2802	280.2
		Total	158	49,440	312.9	137	47,192	344.5
12	Part-time job (Arg.)	G	149	48,750	327.2	113	38,801	343.4
		L	10	2315	231.5	8	2437	304.6
		Total	159	51,065	321.2	121	41,238	340.8
13	Smoking (Arg.)	G	142	42,265	297.6	90	28,035	311.5
		L	9	2081	231.2	4	1257	314.3
		Total	151	44,346	293.7	94	29,292	311.6
	TOTAL	G	1946	617,432	---	1533	523,606	---
	AVE.	---	---	47,494.8	317.2	---	40,277.4	340.9
	SD	---	---	2675.3	12.4	---	4359.4	13.1
	TOTAL	L	127	29,843	---	111	34,407.0	---
	AVE.	---	---	2295.6	235.4	---	2646.7	310.4
	SD	---	---	205.1	20.7	---	444.8	13.0

Appendix 3. Japanese Essay Data and Review Comments Collected in 2013

	Essay topics	Groups	Japanese Essays (Original)			Japanese Essays (Revised)			Review Comments		
			No. of essays	No. of words	Avg. No. of words per essay	No. of essays	No. of words	Avg. No. of words per essay	No. of essays	No. of words	Avg. No. of words per essay
1	Env. pollution	G	140	96,895	692.1	114	92,056	807.5	97	13,478	138.9
		L	10	4952	495.2	9	7330	814.4	9	2364	262.7
		Total	150	101,847	679.0	123	99,386	808.0	106	15,842	149.5
2	Violence on TV	G	141	103,271	732.4	112	89,852	802.3	92	12,348	134.2
		L	9	5396	599.6	9	7161	795.7	7	1046	149.4
		Total	150	108,667	724.4	121	97,013	801.8	99	13,394	135.3
3	Young people today	G	141	108,013	766.0	110	93,676	851.6	118	15,272	129.4
		L	9	5378	597.6	9	7556	839.6	10	1951	195.1
		Total	150	113,391	755.9	119	101,232	850.7	128	17,223	134.6
4	Suicide	G	139	103,370	743.7	112	90,103	804.5	116	15,940	137.4
		L	10	5915	591.5	9	6872	763.6	8	1547	193.4
		Total	149	109,285	733.5	121	96,975	801.4	124	17,487	141.0
5	Sports	G	137	100,701	735.0	119	98,409	827.0	86	12,200	141.9
		L	10	6534	653.4	8	6740	842.5	1	123	123.0
		Total	147	107,235	729.5	127	105,149	827.9	87	12,323	141.6
6	School education	G	156	123,819	793.7	123	107,672	875.4	88	13,123	149.1
		L	11	3314	301.3	10	9223	922.3	10	2942	294.2
		Total	167	127,133	761.3	133	116,895	878.9	98	16,065	163.9
7	Recycling	G	151	111,953	741.4	111	92,507	833.4	89	15,597	175.2
		L	10	5258	525.8	10	9408	940.8	9	3362	373.6
		Total	161	117,211	728.0	121	101,915	842.3	98	18,959	193.5
8	Money	G	154	120,221	780.7	117	98,769	844.2	80	11,486	143.6
		L	9	6391	710.1	9	8061	895.7	8	1788	223.5
		Total	163	126,612	776.8	126	106,830	847.9	88	13,274	150.8

(Appendix 3. continues)

(Appendix 3. continued)

9	Divorce	G	144	113,984	791.6	122	103,454	848.0	86	14,117	164.2
		L	10	5953	595.3	9	7132	792.4	0	0	0.0
		Total	154	119,937	778.8	131	110,586	844.2	86	14,117	164.2
10	Death penalty	G	151	112,393	744.3	129	104,664	811.3	91	12,001	131.9
		L	10	5471	547.1	8	6168	771.0	9	1808	200.9
		Total	161	117,864	732.1	137	110,832	809.0	100	13,809	138.1
11	Crime	G	144	100,001	694.5	124	103,555	835.1	121	17,067	141.0
		L	8	4497	562.1	10	7401	740.1	10	2016	201.6
		Total	152	104,498	687.5	134	110,956	828.0	131	19,083	145.7
12	Part-time job (Arg.)	G	145	110,128	759.5	108	86,732	803.1	65	7339	112.9
		L	10	5535	553.5	8	6491	811.4	9	1759	195.4
		Total	155	115,663	746.2	116	93,223	803.6	74	9098	122.9
13	Smoking (Arg.)	G	132	91,678	694.5	87	66,868	768.6	97	15,373	158.5
		L	9	5127	569.7	4	3306	826.5	10	2257	225.7
		Total	141	96,805	686.6	91	70,174	771.1	107	17,630	164.8
	TOTAL	G	1875	1,396,427	744.8	1488	1,228,317	825.5	1226	175,341	143.0
	AVE.			107,417.5	743.8		94,485.9	824.0		13,487.8	142.9
	SD			8863.2	33.5		10,182.6	26.9		2442.0	15.5
	TOTAL	L	125	69,721.0	557.8	112	92,849.0	829.0	100	22,963.0	229.6
	AVE.			5363.2	561.7		7142.2	827.4		1766.4	203.0
	SD			799.4	91.6		1438.6	58.5		920.4	84.4

Appendix 4. List of 30 RST Relations

	\<タグ\>	英語名	日本語名	説明	RST による説明
1	BGRD	Background information	背景	議論の背景となる情報を提示している	The context or the grounds on which the claims are to be interpreted. There are two types of background information; the one which is not directly linked to the thesis statement in the introductory paragraph, and the one which is directly related to the thesis statement in the introductory paragraph.
2	GNES	General statement	話題の提示	一般的な話題を提示している	The sentence presents general information, for example, to start the paragraph.
3	THSS	Thesis / Main claim	主題・主張	全体の主題、または筆者の主要な主張を提示している	The sentence presents thesis or writer's main claim.
4	ORGN	Organization	構成・方向付け	議論の構成や方向を示している	The sentence directs the way to which the discussion takes place or is organized.
5	CDTN	Hypothetical condition	前提（仮定条件）	議論の前提となる「仮定的な条件や前提」について述べている（もし～なら；もし～でなければ）	The truth of the proposition associated with the N[1] is a consequence of the fulfillment of the condition in the S. The S presents a situation that is not realized yet.
6	CRCM	Circumstance	前提（現実条件）	議論の前提となる「現在の状況や条件」について述べている（現在～のような状況にある（ので／が、、、））	The situation presented in the S provides the context in which the situation presented in the N should be interpreted. The events described in the S are somewhat co-temporal.
7	ELBR	Elaboration	詳述	前述の内容を詳細に説明している	S presents additional detail about the situation or some element of subject matter in N; Details of N
8	ADTN	Addition	追加・補足	情報を追加・補足している	The S provides additional information on the N
9	PRPH	Paraphrase	言い換え	前述の内容を別の表現で言い換えている	The S paraphrase a statement presented in the N.
10	RTRN	Reiteration / Restatement	繰り返し（強調）	前述の内容を再度繰り返している（強調）	The S reiterates/restate the information presented in the N.
11	EXMP	Example	例証	前述の内容の具体例を示している	The S provides an example with respect to the information presented in the N.

(Appendix 4. continues)

	<タグ>	英語名	日本語名	説明	RST による説明
12	EVDC	Evidence	証拠	前述の内容ををサポートする証拠やデータを提示している	The situation presented in the S provides evidence or justification for the situation presented in the N. Evidence is data to convince the reader of a point.
13	JSTF	Justification	正当化	前述の内容を正当化する議論を展開している（具体的な例やデータの提示はない）	The situation presented in the S justifies the situation presented in the N. S increases the reader's readiness to accept the writer's claim. (without data)
14	RSON	Reason	理由	前述または後述の内容の理由（＝なぜそうなったか）を提示している	Multi: The S is the reason for the N.
15	CAUS	Cause	原因	前述または後述の内容の原因（＝起因）を提示している（A is caused by B）	Multi[2]) (Cause-Result): The situation presented in the N is the cause of the situation presented in the S. The cause (the N) is the most important (target sentence).
16	RSLT	Result/Effect	影響・結果（直接的）	前述または後述の内容の直接的な影響または結果を提示している	Multi (Cause-Result): The situation presented in the S is the cause of the situation presented in the N. The result (the N) is the most important part (target sentence).
17	CNSQ	Consequence (= indirect effect/result)	影響・結果（間接的）	前述の文脈からの結果を提示しているが、原因・結果の関係よりも直接的な関係は薄い	Multi: The situation presented in on span[i] is a consequence of the situation presented in the other span. The relations CAUSE and RESULT imply a more direct linkage between the N and the S, whereas a CONSEQUENCE relation suggests a more indirect linkage.
18	PRBL	Problem	問題	前述または後述の内容の問題点や争点を提示している	Multi (Problem-Solution): The situation presented in the N is the problem of the situation presented in the S. The problem (the N) is the most important part (target sentence).
19	SLTN	Solution	解決	前述または後述の問題点や争点に対する解決策を提示している	Multi (Problem-Solution): The situation presented in the N is the solution of the situation presented in the S. The solution (the N) is the most important part (target sentence).
20	CNCL	Conclusion	結論	前述の内容を受けて、全体をまとめる何らかの	Multi: The S presents a final statement that wraps up the

				結論（合理的判断、推意、論理的必然等による最終陳述）を提示している	situation presented in the N, such as reasoned judgment, inference, necessary consequence, or final decision.
21	SMRY	Summary	要約	前述または後述の内容を要約している	The target sentence either (1) summarizes the information presented previously, or (2) presents a summary of information to follow.
22	INTP	Interpretation	解釈	前述の内容に関する書き手の主観的解釈を提示している	Multi: One span[3)] (or the S/N) presents the personal opinion of the writer or of a third party. An interpretation can be: 1) an explanation of what is not immediately plain or explicit; 2) an explanation of actions, events, or statements by pointing out or suggesting inner relationships, motives, or by relating particulars to general principles; or 3) an understanding or appreciation of a situation in light of individual belief, judgment, or circumstance.
23	EVAL	Evaluation	評価	書き手または第3者の価値判断を提示している	Multi: On span (or the S/N) assess the situation presented in the other span (or the S/N) of the relationship on a scale of good or bad. An evaluation can be an appraisal, estimation, rating, interpretation, or assessment of a situation. It can be the viewpoint of the writer or another agent in the text. (eg; it is the best way…)
24	CNTR	Contrast	対比・比較	先行または後述の内容に対して比較または対照となる内容を提示している	The two sentences or two spans have similarities or differences by the comparison. The N and S are the same in many respects but differences in a few respects.
25	ANTI	Antithesis	反予測	先行する文脈から想定される事態や状態に反する内容を提示している	Multi: The situation presented in the N comes in contrast with the situation presented in the S. (eg; the sentence starting with Although, But etc.) See Contrast

26	CSSN	Concession	譲歩	先行する文脈から想定される事態や状態の否定を容認する内容を提示している（〜だが、〜はもちろん認めるが、、、）	The writer acknowledges a potential or apparent incompatibility between the situations presented in the N and S; however, the writer regards the situations presented in the N and S as compatible which increases the reader's positive regard for the situation in the N.
27	QLFY	Qualification(reservation)	保留	先行する内容に関する保留条件を提示している	N provides a certain condition within which a subject matter can be excluded, or the exception to the writer's claim.
28	ALGY	Analogy	類推・類似	先行の内容にかかわる情報を、現在の文脈において、２者間の何らかの類似性に基づいて適用している	An analogy contains an inference to the main claim.
29	RQTN	Rhetorical question	修辞疑問（反語；訴求）	読み手の注意を喚起する目的で、何らかの反語的発言を提示している	The S poses a question vis-à-vis a segment of the text; the intention of the author is usually not to answer it, but rather, to raise an issue for the reader to consider, or to raise an issue for which the answer should be obvious.
30	NLOG	No logic (No apparent logical connection; illogical argumentation)	論理的不整合または破綻	先行の文との論理的なつながりが欠落している。	The target sentence has no apparent relevance or logical connection with regard to the previous statement(s) or the main topic of the discourse.

Appendix 5. English Rubric

Trait	Level (score) and Description			
	Level1(score1-3)	Level2(score 4-6)	Level3(score 7-9)	Level4(score 10-12)
Content and Topic Development	**Very Poor** The ideas are unclear, inconsistent and/or lack a central theme. The essay shows little knowledge of the topic. Little or no details, or irrelevant specifics to support main ideas.	**Fair to Poor** The ideas are somewhat unclear. The essay shows limited knowledge of the topic. The main idea development is limited. Most supporting details are too general and /or irrelevant.	**Good to Average** The ideas are generally clear. The essay show fair knowledge of the topic. Main ideas are developed in general, but supporting details are at times too general and/or irrelvant.	**Excellent to Very Good** The ideas are clear. The essay is knowledgeable and relevant to the topic. Main ideas are fully developed by supporting details.
	Level1(score1-3)	Level2(score 4-6)	Level3(score 7-9)	Level4(score 10-12)
Organization and Retorical Features	**Very Poor** The essay lacks rhetorical control and orgainization. There are no or almost no cohesive devices.	**Fair to Poor** The organization of the essay is somewhat unclear with few cohesive devices. Some noticiable lack of rhtorical fluency: redundacy, repetition, or a missing transition across and within paragraphs and sentences.	**Good to Average** The essay is fairly organized with some cohesive devices appropriately used. Ocassional lack of rhetorical fluency: redundacy, repetition, or a missing transition across and within paragraphs and sentences.	**Excellent to Very Good** The essay is well-organized with logicaly sequenced paragraphs. In paragraphs, the sentences are logically connected. A variety of cohesice devices are appropriately and effectively used.
	Level1(score1-3)	Level2(score 4-6)	Level3(score 7-9)	Level4(score 10-12)
Grammar	**Very Poor** The essay has extremely repetitive sentences or simple sentences. Due to inaccurate sentence structures or grammatical erros, meaning of the sentences are uncertain.	**Fair to Poor** Simple sentences or repetitive sentences are often used. Sentence structures are somewhat inaccurate. There are frequent errors of agreement, tense, number, word order/function, articles, pronouns, prepositions, and so on.	**Good to Average** A variety of sentences are appropriately used in general. Sentence structures are mostly accurate. There are several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions, and so on.	**Excellent to Very Good** A variety of sentences are appropriately used. Sentnce structures are accurate. There are few or no errors of agreement, tense, number, word order/function, articles, pronouns, prepositions, and so on.
	Level1(score1-3)	Level2(score 4-6)	Level3(score 7-9)	Level4(score 10-12)
Vocabularly	**Very Poor** The essay shows an extremely restricted range of words and idioms, the use of words or word forms is niticeably inappropriate.	**Fair to Poor** The essay shows a limited range of words and idioms it contains frequent errors of word/idiom form, choice, and/or usage.	**Good to Average** The essy shows an adequate range of words and idioms. It contains occational errors of word/idiom form, choice, and /or usage.	**Excellent to Very Good** The essay shows a sophisticated range of words and idioms. Words and idioms are appropriately used.
	Level1(score1-3)	Level2(score 4-6)	Level3(score 7-9)	Level4(score 10-12)
Appeal to the readers	**Very Poor** The writer is not aware of his/her readers. The ideas are too strong and not convincing at all.	**Fair to Poor** The writer is somewhat aware of his/her readers, but the ideas are not so convincing nor appealing to the readers.	**Good to Average** The writer is aware of his/her readers. It is convincing and appealing to the readers.	**Excellent to Very Good** The writer is well aware of his/her readers. It is very convincing and appealing to the readers.

Note. ESL Composition Profile (Jacobs, et al., 1981) revised by Yamashita (2015)

Appendix 6. List of MDM

MDM	G1	G2	Law
Code Glosses			
called	0	1	2
for example	5	6	13
for instance	1	0	0
I mean	1	0	0
〜mean	7	0	1
in fact	4	2	2
in other words	3	0	0
indeed	0	0	1
especially	9	6	1
such as	10	8	4
that is	8	1	0
that means	1	0	2
this means	0	0	1
which means	1	1	0
Total	**50**	**25**	**27**
Frame Markers			
Sequencing			
finally	6	3	0
first	5	1	3
firstly	5	2	2
first of all	7	6	1
At first	0	2	0
The first point is	1	3	0
My (The) first reason is	0	4	0
last	0	1	1
At last	1	0	0
next	1	0	0
second	3	1	0
The (My) second (reason, point, advantage, case)	6	8	0
secondly (second of all)	4	7	0
then	6	3	3
third (point, reason)	1	3	0

(Appendix 6. continues)

MDM	G1	G2	Law
thirdly	0	1	0
Total	46	45	10
Transition Markers			
Also	4	7	1
although	8	4	0
and (And)	60	57	50
as a result	0	0	2
at the same time	4	1	0
because (Because)	56	31	13
because of (Because of)	18	12	2
besides	1	0	0
but (But)	13	18	24
even though	5	1	0
Furthermore	0	1	0
hence	1	0	0
however (However)	27	42	5
In addition (to)	7	9	0
lead to	4	0	0
Moreover (Moreover)	12	7	6
on the other hand	1	2	1
result in	1	0	0
since	8	5	0
so (So)	6	12	22
so that (so as to)	2	0	1
still (=nevertheless, yet)	1	1	0
therefore (Therefore)	18	10	7
though	0	1	3
thus	3	3	0
whereas	1	0	0
while	2	1	3
Total all MDM	**263**	**225**	**140**
Endophoric Markers			
X above (mentioned above)	8	5	1
Total	**8**	**5**	**1**

MDM	G1	G2	Law
Evidentials			
according to	1	2	0
Total	**1**	**2**	**0**
Frame Markers			
Label stages			
in short	0	0	2
in summary	1	0	0
overall	0	1	0
In conclusion	13	11	0
Total	**14**	**12**	**2**
Announce goals			
in this essay	2	2	0
This essay	8	2	0
focus	1	0	0
would like to	6	2	1
Total	**17**	**6**	**1**
Shift topic			
now	1	0	2
well	0	0	1
Total	**1**	**0**	**3**
Others			
that is because	3	0	0
mentioned above	2	0	0
Total	**5**	**0**	**0**