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A SYSTEMIC FUNCTIONAL ANALYSIS OF TOEFL SAMPLE WRITINGS

A thesis submitted to
the Graduate College of
Marshall University
In partial fulfillment of
the requirement for the degree of
Master of Arts

In
English/TESOL
by

Yuki Nakamura

Approved by

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Dr. Kateryna Schray

Marshall University
May 2018


APPROVAL OF THESIS

We, the faculty supervising the work of Yuki Nakamura, affirm that the thesis, "Systemic Functional Analysis of TOEFL Sample Writings," meets the high academic standards for original scholarship and creative work established by the English MATESOL and the College of Liberal Arts. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.


Dr. Hyo-Chang Hong, Department of English

Committee Chairperson

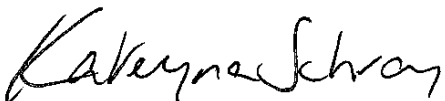
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ABSTRACT

The purpose of this study is to investigate the tendency of the structural and lexico-grammatical features between high score writings and low score writings by comparing some sample writings of TOEFL practice text books from the perspectives of Systemic Functional Linguistics. Especially, this study focuses on analyzing clause complex, grammatical metaphor, lexical density, and causality of the sample writings of TOEFL practice books. The analysis shows the tendency to get higher scores with appropriate and effective writing structure of the writing section of TOFL iBT. Actually, most practice textbooks briefly provide only the templates that enable the test takers to memorize the form of the construction of the writing and some simple ways of use of conjunctions which is for logically structured writings. The study proves some defects of introduction and explanation part of the writing section of TOEFL iBT; especially, the explanation of ways of conducting text flow, such as effective use of adverbs and conjunctions and word choices, and so on.

CHAPTER 1

LITERATURE REVIEW

1.1 FORMAL AND FUNCTIONAL LINGUISTICS

Traditionally, linguistic research has been based on structural perspectives that focus on linguistic forms and technical aspects of language.

There are a variety of formal approaches, but the most influential linguist who advocates formal perspective is Norman Chomsky, and his approach is called Chomskyan formal linguistics. The major framework of this theory is constructed out of the concept of Universal Grammar (UG), which is based on the hypothesis that every human being is born with the inherent capacity to acquire language because, according to Chomsky, human brains are wired to set up language rules, such as word order, because of the Language Acquisition Device (Curzan & Adams, 2011, p.311).

In order to understand more clearly about Chomskyan linguistics, there are two essential terms: competence and performance. Competence is a set of underlying linguistic rules whereas performance is the actual way of using language, and it is hypothesized that performance does not always reflect competence. This separation of language into competence and performance further makes it difficult to include aspects of social functions of language, so it seems difficult for Chomskyan linguistics to explain the ways in which language manipulation or use is possible in wider social contexts (Curzan & Adams, 2011, pp.191-3).

Even though the Chomskyan approach has influenced formal linguistics, many scholars began to question core formal linguistics concepts. Some scholars have denied the existence of UG. Bauer (2007) argues that UG is not seen in any readings and discourse, so to prove the existence of UG, actual language use should be examined which researchers can observe.

Moreover, some of the researchers show their disagreement toward UG based on perspectives from neurolinguistics because they have not seen an area of the brain function to control and develop language, but they found several areas in the brain which are related to first and second language acquisition (Everett, 2006). So, in some sense, this formal approach to language seems to be over-generalized and more idealistic than real (Bauer, 2007, p.49).

Another linguistic perspective that moves away from such an idealized way of examining language is the functional approach, and the concept of functional approach involves social and interpersonal aspects of language use. In regard to this, Schleppegrell says that “rather than seeing language as a set of rules, the functional perspectives see the language system as a set of options available for construing different kinds of meaning” (2004, p.7).

In order to trace the history of functional linguistics, we need to go back to the 1920s when a Czech scholar, Vilem Mathesius established the Prague Linguistics Circle in Europe (Bloor & Bloor, 2004). Since then, this linguistics branch has developed functionalism-based linguistics. At the same time, the Copenhagen school, also known as the London school, was established by Louis Hjelmslev and the study of J.R. Firth took over the school. Neo-Firthian linguists, especially Michael Halliday, were influenced by Malinowski’s study which attempts to develop a social semiotic functional theory of language (Bloor & Bloor, 2004). The social semiotic functional theory of language is a solution to both syntagmatic and paradigmatic issues, and Halliday’s study of social semiotics (1978) sets the foundation of Systemic Functional Linguistics (SFL). The main concern of SFL is with the function of language in society. Language, observed from the perspective of SFL, is recognized as resources of numerous system networks; therefore, it is considered as systemic. It allows language selections out of paradigmatic options to make meaning on the multiple strata of language system. On the strata,

the function of language in context is in meaning making, so it is considered functional. Moreover, meaning making resources are influenced by cultural, social, and contextual variables. In this sense, SFL is a functional-semantic approach to language that investigates language use of people in different kinds of contexts and language construction for semantic systems (Eggins, 2004, pp.20-21).

1.2 SYSTEMIC FUNCTIONAL GRAMMAR

The fundamental concepts for SFL are syntagmatic and paradigmatic relations. Syntagmatic relations are relations in which signs accompany sequence and structure, and paradigmatic relations are relations in which signs exist as a result of systemic choices (Eggins, 2004, p.190). According to Halliday, syntagmatic order is the constructive aspect of language; in other words, a word is composed with number of letters; a sub-sentence is composed with number of words; a sentence is composed with a whole number of sub-sentences (Halliday, 2004, p.20-21). In regard to paradigmatic relations, the concept of paradigmatic relations refers to what clause constituents could be used instead of what other constituents and why certain functional categories are used in a text instead of some other categories (Halliday, 2004, p.22).

Another important notion of SFL is stratification. According to Halliday, language is a complex semiotic system, and has various levels and strata (2004, p.24). The semantic systems are related to language systems as follows.

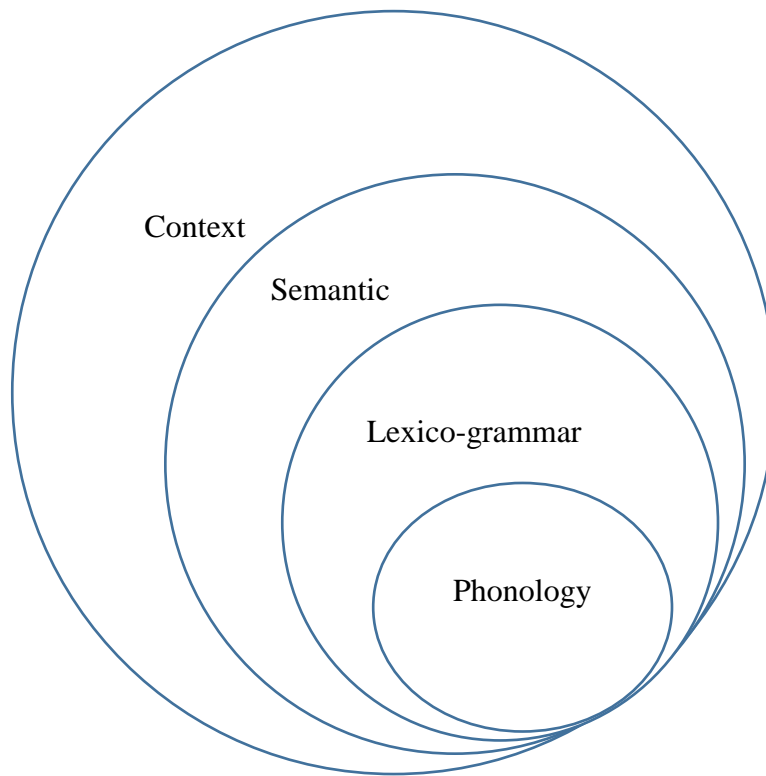


Figure 1. Stratification (adopted from Halliday, 2004, p.25)

The systems are metaredundantly constructed with phonology, lexico-grammar, and semantics. The interpretation of lexico-grammar is “an emergently complex pattern of phonological patterns, and the interpretation of semantics is “a complex pattern of lexico-grammatical pattern” (Martin, 2010, p. 5). Moreover, according to Halliday, context is embedded in the linguistic system (Halliday, 2004, p. 26).

Context of situation has important functions to distinguish register as a functional variety of language (Halliday, 2004, p.27). The differences of context are distinguished by the SFL terms of field, tenor, and mode. Field describes topics; in other words, what is talked about; tenor describes the relationship between speaker and listener; and mode describes the expectation of text types organized according to the preference of text types.

The most significant difference between formal and functional approaches is the use of actual discourse (Bloor & Bloor, 2004, p.5). Halliday also argues for the importance of language used in various contexts in order to investigate the quality of texts and hidden values within the texts (Halliday, 1994, p. xxx).

It is believed that SFL can conduct text analysis successfully for different kinds of genres and purposes. Therefore, SFL has much potential to function as an identifier of a variety of texts. Therefore, the SFL theory for academic and other purposes of writing should be beneficial for native-English speakers and non-native English speakers.

1.3 RATIONALE

As was briefly mentioned in the introduction, the functional approach to language has the potential to examine language from a larger perspective than what formal linguistics makes possible. This thesis is a result of the analysis of the TOEFL iBT (Test of English sample writings from TOEFL practice textbooks, used by TOEFL test takers) from perspectives of systemic functional linguistics.

TOEFL iBT is one of the major standard tests for non-native English speakers applying to colleges and universities in English-speaking countries, and more than 6000 institutions of higher education and 136 countries accept TOEFL scores (Anderson, 2009, p.1).

The major difference between the conventional tests such as paper-based tests and TOEFL iBT is the component of the examined ability. The conventional version of the TOEFL tests the three skills of reading, listening, and grammar structure with multiple-choice answers. The TOEFL iBT test, however, combines all the four skills of reading, listening, speaking, and writing. Moreover, with regards to speaking and writing sections, integrated tasks are required; in fact, in these sections, test takers are required to listen to conversations, and compare the ideas

from the conversations with test takers' own opinions in order to articulate their ideas logically. Moreover, in case of the writing section, a reading passage, with 230 to 300 words, pops up on the screen and test takers are allowed to read it for three minutes. After reading, test takers are given a two minute lecture, and they are allowed to take notes on the lecture. And finally they prepare a summary by comparing the content of both the reading passage and the lecture. For only writing and speaking sections, reading and listening skills are also required; therefore, it is safe to say that the TOEFL iBT test examines the proficiency of all skills, such as reading, listening, speaking, and writing, required in academic and everyday life; in other words, multi-English task proficiency is tested.

However, although multiple skills are now required to successfully get a high score on the test, TOEFL test preparation or test books do not always suggest how EFL students can combine these skills, nor show what contributes to good EFL writing. From both my personal and other international students' experiences, when it comes to learning a foreign language, it is not enough to read that EFL students are now required to combine multiple skills in order to take a foreign language proficiency test.

The purpose of this thesis is to analyze TOEFL sample writings for the writing practice part in order to determine what functional elements play a role in the determination of good, proficient, or poor writing.

1.4 GRAMMATICAL METAPHOR AND CLAUSE COMPLEXING

In this section, I will briefly summarize the Systemic Functional Linguistic (SFL) theory that I used to analyze the TOEFL iBT data.

In SFL, the main lexico- grammatical ways in which clauses are combined to form clause complexes are treated as part of logico-semantics. Logico-semantics refers to the relationship

between clauses that combine more than two clauses to form clause complexes (Halliday 2014, p. 432). Clause complexes in this theory are a semantic unit in which clauses interact with each other through the functional relations of taxis and projection. This kind of functional relationship between clauses in clause complexes has evolved to be the largest lexico-grammatical unit of language (Halliday, 2014, p. 436). Therefore, the notion of the clause complex can facilitate the analysis of grammatical combination of clauses.

In order to systematically explain the notion of clause complexes, we need to focus on two basic systems that determine the types of composition; in other words, they describe how one clause connects with another. One of the systems is taxis, showing the degree of interdependency, and the other system is logico-semantic relations.

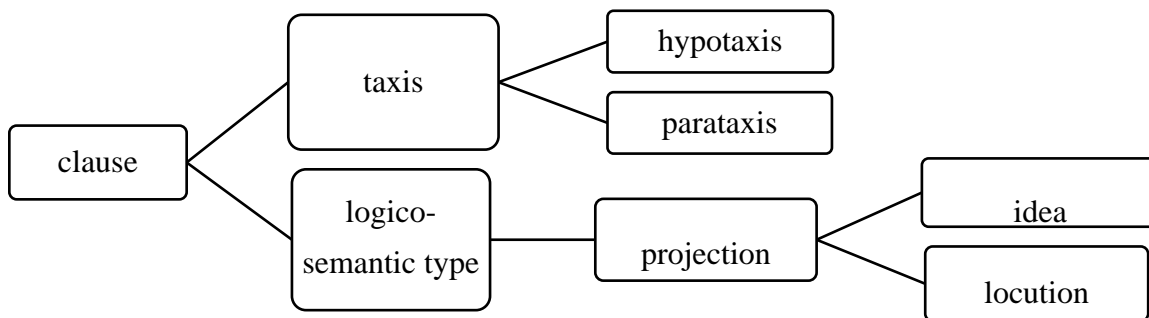


Figure 2. System of Clause Complexing

In order to demonstrate the degree of interdependency between clauses in a clause complex, taxis is mainly focused on in this project. Taxis is subcategorized into two different degrees of interdependency: parataxis and hypotaxis. Paratactic relationship indicates that clauses, constructing a clause complex, maintains an equal status; for example, *I ate a pie, and he ate a piece of cake*. In this case, the whole clause complex is constructed with two clauses, *I*

ate a pie and *he ate a piece of cake*. The distinctive feature of paratactic relations is that the basic sequential meanings between clauses do not change with the change of clausal positions.

Therefore, parataxis is related to the equal status of clauses in clause complexes.

However, hypotactic relations realize an unequal status between clauses in such a way that the dominant clause is foregrounded against the background of dependent clauses. For example, in *he was sleeping when I came home*, the dependent clause only provides the temporal background against which the dominant clause is interpreted. Therefore, the sample sentence, *he was sleeping when I came home*, is categorized as hypotactic because of the different contributions that each clause makes to the overall meaning of the clause complex.

Because of such different contributions that different clauses make to the overall meanings of clause complexes, paratactic and hypotactic relations in SFL are treated differently: paratactic relations are represented by numerical notations, such as 1, 2, 3, whereas, in the case of hypotactic relations, Greek letter notations, such as α , β , γ , are used. Clause complex is constructed by tactic relations, both parataxis and hypotaxis, so one sentence is connected like a chain, and the sequential patterns of these chains become part of the interpretation of a text. A simplified notation scheme is exemplified in Table 1.

Table 1. Primary and Secondary Clauses in a Clause Nexus (adopted from Halliday, 2014, p. 442)

| | Primary | Secondary |
|-----------|---------------------|---------------------|
| parataxis | 1 (initiating) | 2 (continuing) |
| hypotaxis | α (dominant) | β (dependent) |

In any texts, this distinction between paratactic and hypotactic relations can be used in any combination in clause complexes.

Another important concept in the discussion of clause complexes is the notion of nesting, which is treated as a general dimension of logico-semantic structure; in other words, nesting refers to embedding where the semantic range of a clause in a clause complex reaches only one particular clause instead of the whole range of clause complexes. Clause complex nesting in SFL is represented as sets of parentheses such as $1 \wedge 2 (\alpha \wedge \beta)$ or $1 \wedge 2\alpha \wedge 2\beta$.

1.5 LOGICO-SEMANTIC RELATIONS

We have discussed the taxis of clause complexes, showing the independency of the clause nexus. Now, we need to focus on another aspect of clause complexes: logico-semantic relations. Logico-semantic relations show various means of connection between clauses within a clause complex. It has a wide range of different types of logico-semantic relations, but can generally be categorized into the two fundamental relations of expansion and projection.

The function of expansion occurs in the secondary clause, and it expands the context or meaning of the primary clause; in other words, the expansion of the primary clause is directed by the secondary clause. Expansion is subcategorized into three kinds of functions: elaboration (=), extension (+), and enhancement (\times), and projection is subcategorized further into locution and idea, which are notated by double quotation marks, (“”), and single quotation marks, (‘), respectively.

The fundamental notion of both expansion and projection can be illustrated with the way that conventional comic strips are organized. The function of expansion is similar to the frames of the comic strip, making up the strip and separating the sequence of happenings or events; in other words, expansion shows the horizontal development of the text.

To briefly summarize the various logico-semantic relations with SFL notations, elaboration (=) is a clause that expands the content of the primary clause by elaborating it, and

presenting greater details or specifying the content, or providing examples or comments of the author. Extension (+) is a clause that expands other clauses by adding new information or elements, giving alternation, or giving exceptions, and enhancement (×) is a clause that expands other clauses by giving more details through the use of circumstantial features, such as time, place, cause, or condition.

In terms of projection, locution is the representation of someone's speech either through directly quoting or indirectly paraphrasing as a way of representing someone else's ideas in texts.

The symbols for logico-semantic relations, such as elaboration (=), extension (+), and enhancement (x), are placed before tactic relation symbols, such as Greek letters α , β , and γ for hypotaxis; numerical orders, 1, 2, and 3, for parataxis. For example, the clause complex, *because I made mistakes, he got angry*, is separated into two clauses with the functions of $\times \beta \wedge \alpha$:

|||*because I made mistakes, //he got angry*|||

Causality is categorized as enhancement, so the symbol of enhancement (x) is set before the hypotactic relation. This way of marking logico-semantic meanings makes it possible to specify various other clausal meanings in clause complexes. For example, *while I was in the library, he was home*, is divided into the two clauses of additive or contrastive meaning. In other words, the logico-semantic relation of clause nexuses is that of extension (+), and the clause nexus is analyzed as $+\beta \wedge \alpha$. And in *she heard that he would be late*, the second clause is a representation of the knowledge status of Mary, and hence that of projection, and is represented as an idea clause (‘). The representation of this clause nexus is $\alpha \wedge \beta$. These examples, mentioned above, have the following logico-semantic functions.

- | | | | |
|----|-----------------------------|------------------------|------------------------------|
| 1. | Because I made mistakes, | he got angry. | $\times \beta \wedge \alpha$ |
| 2. | While I was in the library, | he was home. | $+ \beta \wedge \alpha$ |
| 3. | Mary knew | that he would be late. | $\alpha \wedge ' \beta$ |

1.6 GRAMMATICAL METAPHOR

For the development of writing skills, learners need to recognize the distinctive linguistic forms used for technical language; in other words, they need to expand the knowledge of the use of vocabulary and grammar. The grammar, mentioned in this section, is different from the ordinary notion of school grammar.

Grammar is theory of human experience. Evolution of grammar has occurred in human species, and it has contributed to human evolution. Grammar has evolved in the human brain in which human experiences are transformed into meaning, so grammar is considered as a device to establish categories through our perceptions, construed by our experiences, modeling complex human interaction in its environment, and imposing categories on us (Halliday, 2004, p. 51). Grammatical categories, created by grammar, impose the concept on human beings, so categories are the mixture of certain phenomena, and they determine the meaning of the phenomenon. Moreover, categories, construed by our experiences are construed grammatically, so they lead us to understand our environment and ourselves. Grammar is used in physical worlds by being reflected in lexico-grammar. In order to show the connection between categories, created by human experience and grammar, we need to focus on Processes (considered as a 'verb' in conventional grammar). In the stratification of SFG theory, processes construe our experiences and compose grammatical units, or clauses.

In the grammatical process, our experiences are transformed into meaning, and this process is called theoretical operation. In this operation, the differences between meaning and lexico-grammatical forms are theorized as grammatical metaphor (GM). The most significant

difference between lexical metaphor and GM is the patterns of realization (Yang, 2011, p. 1).

Grammatical metaphor is considered as a phenomenon that shows a mapping between the same meanings, but different grammatical categories.

In order to explore the theory of GM, we need to understand the basic differences of expression between science and commonsense knowledge. A typical preferred writing style for science is the use of nominal groups. Nominal groups are power resources to make meaning concrete and hard to refute through negation (Halliday, 2004, p. 61). When the transformation from a congruent form to nominalization occurs, its modifying function can further be changed, affecting the meaning of its modifiers. For example, in *four legged animal*, *four legged* functions as a classifier that contrasts with other types of animals, but its congruent meaning that an animal has four legs simply refers to the fact that an animal has four legs. If a verbal group is transformed into its incongruent form, the verb tense and the process type of the clause in which the incongruent form is used can further be changed to show relations between phenomena rather than actions of the clause subject.

An important notion of GM is the occurrence of metaphoric transformation from clausal level to a nominal mode of construal. This transformation includes the process of cross coupling. Cross coupling is the maximum level of movement within a grammar: it causes clauses to go down in the rank system and a change in grammatical classes.

In the previous section, the notion of normalization was discussed because it helps to understand a larger shift of grammatical changes within lexico-grammar. One result of this change is that lexical words that come from the process of grammatical metaphorical processes contribute to the density of meanings that a clause can express.

1.7 LEXICAL DENSITY

A number of researchers have argued that lexical or meaning density is one property of language that depends on the mode of language use between speech and writing. This kind of lexical meaning difference also contributes to register differences. Lexical density is widely known as “measure of richness of vocabulary that provides a robust method of distinguishing genres” (Stubbs, 1996, as cited Castello, 2008, p. 52). Moreover, lexical density contributes to the identification of the level of text complexity; therefore, measurement of lexical density of texts at different levels of writings makes it possible to compare texts in order to seek the difference of text complexity.

Halliday (2004) provides a measurement of how to calculate lexical density:

$$\text{LDU (\%)} = \frac{\text{Number of lexical words}}{\text{Total Number of words (token)}} \times 100$$

1.8 CAUSALITY

Causality, the lexico-grammatical and semantic relationship between cause and effect, is yet another element of meaning related to clause complexing and grammatical metaphorical processes. The function of lexico-grammar and lexical words as causality is established with a variety of SFG mechanisms, such as causality of circumstantial elements, process types, the perspective from ergativity, and textual metafunction.

Circumstances accompany processes and expand the meaning of processes by modifying the meaning of the process with time, place, manner, cause and contingency; in other words, the notion of time, space, cause, manner, and contingency are associated with the grammatical notion of ‘*when, where, why, and how.*’ Therefore, circumstantial elements are considered as modification of processes (Halliday, 2004, p. 311).

In this study, one of the circumstantial meanings, *cause*, is mainly focused on. The circumstantial element of clause contributes to the construing of and actualization of processes. The types of circumstantial causal elements are subcategorized into the four categories of circumstantial expression of reason, purpose, behalf, and contingency.

The circumstantial expression of reason is usually expressed with prepositional phrases, such as *through, from, for*, and complex phrases such as *because of, as a result of, thanks to, due to*, and so on.

1. *Some people believe that he died **because of** cancer.*
2. ***Thanks to** a lot of help and encouragement, we achieved the goal.*
3. ***Because of** asthma, I couldn't attend the meeting.*

The circumstantial expression of purpose indicates if an action includes the intention of the actor; in other words, it reveals the sense of '*in order to*' or '*in order that*' (Halliday, 2004, p. 321). The circumstantial expression of purpose is often represented with a variety of binders such as '*for*,' '*for the purpose of*,' '*for the sake of*,' and '*in the hope of*.'

1. ***In order to** get higher score, I study every day.*
2. ***For the sake of** peaceful world, we are against terrorism.*
3. ***For the purpose of** getting clear water, we should stop throwing trash in rivers.*

The realization of the semantic relation of reason and purpose tends to be separated into individual clauses out of whole sentences. For example, *I did it to get my own love back, because he is ardently in love with her and forgot about me*. In this case, the sentence is separated into four clauses.

| Clause # | Clause |
|----------|---|
| 1 | I did it |
| 2 | (in order to) to get my own love back |
| 3 | because he is ardently in love with her |
| 4 | and forgot about me. |

The expression of behalf is recognized typically as entity. Along with the other circumstantial meanings, it is expressed with prepositional phrases, such as 'for' and some complex prepositions, such as 'for the sake of,' 'in favor of,' or 'on behalf of,' for example.

1. *Have you ever done that **for me**?*
2. *The clergy was responsible for the community's spiritual well-being and therefore interacted by prayer and sacred ceremony with an inscrutable God **on behalf of His 'creatures here below.'***
3. *Is that [why you've decided to speak out **in favor of voluntary euthanasia legislation**]*

(Text 6, adapted from Halliday, 2004, p. 322)

Circumstantial contingency is also partially categorized as a causal aspect, because contingency is a relation between processes. Therefore, circumstance of condition, one of the categories of contingency, is sometimes construed as a prepositional phrase or as a noun construed as a nominalized process. (Halliday, 2004, p. 324). Therefore, the expression of contingency is also categorized as a causal element.

Circumstantial concession is considered as a frustrated cause: the sense of frustrated cause is 'although,' and it is usually expressed with 'in spite of' or 'regardless of' (Halliday, 2004, p. 323). These concessive expressions are expressed with the sense of 'for all.' For example:

1. ***In spite of its beacon**, many ships have been wrecked on this rocky coast during storms or in dense fog.*
2. *The performance exists **regardless of the mental state of the individual**, as persona is often imputed to the individual **in spite of his or her lack of faith in- or even ignorance of- the performance.***

(adapted from Halliday, 2004, p. 323).

CHAPTER 2

DATA AND ANALYSIS

The data that I analyzed were extracted from two TOEFL iBT textbooks. In order to examine the patterns of EFL writing development, all the sample writing samples were collected from the two books. The textbooks organize their sample writings from the highest to the lowest scored writings, with some explanations of the scores. These explanations seem to be quite vague in that they all talk about the ways in which paragraphs do or do not work well, or flows do or do not always work in the sample writings. The main issue in the textbooks seemed to be related to the disconnect between the explanations and the sample examples used in the books. That is to say, EFL learners are expected to read the explanations and figure out by themselves how good writing samples use various lexico-grammatical systems and what kind of lexico-grammatical systems are used in low scored samples.

Altogether, the data collected for analysis had 413 clauses with 3399 words including both lexical and grammatical items.

METHOD OF ANALYSIS

2.1 ANALYSIS OF CLAUSE COMPLEXES

For the analysis of the logico-semantic complexity of clause complexes, the following steps were taken. The 13 texts for this analysis were divided into individual clauses, and the clauses were analyzed as follows: paratactic relation was represented with Arabic numbers, and ranking clauses in clause complexes were symbolized with Arabic numerals, and hypotactic relations were represented with Greek letters such as α , β ; and, logico-semantic relations were labeled, = (elaboration), + (extension), and \times (enhancement). Next, the frequency of the use of clause complexes and simplexes were calculated with percentages, to get the tendency of the use

of clause complexes according to the proficiency level. Moreover, the logico-semantic relation types of all sample writings were counted in order to seek the tendency of logico-semantic use according to each proficiency level.

2.2 ANALYSIS OF GRAMMATICAL METAPHORS

In order to investigate grammatical metaphor, each word or phrase was analyzed by referring to ‘the general drift of grammatical metaphors’ (Halliday, 2004, p. 76).

In this analysis, each word and some prepositional phrases were analyzed based on the notion of the general drift of grammatical metaphor. For example, in the case of a sentence, from one of sample writing at Level 5, *Many (people) believe that telling the truth is not always the best when dealing with people*, is analyzed in the following way.

1. α *Many (people) believe*
 β α *that telling the truth is not always the best policy*
 (Process→Entity) (Quality→Entity) (Process→Entity)
 $\times\beta$ *when dealing with people.*

2.3 ANALYSIS OF CAUSALITY

In order to investigate the causality in the sample writings, causal elements were mainly divided into four types: adverbial, verbal, nominal, and prepositional. In this analysis, all causal items in the sample writings were categorized into the four types, and the categorized causal items were calculated according to the causal types in order to seek the tendency of the use of causal items among the levels.

ANALYSIS AND RESULT

2.4 CLAUSE COMPLEXES

The number of clause complexes in all sample writings was 413, and the number of clause complexes was 274 in the writing samples collected for this thesis. The highest percentage of clause complexes was the sample writing Drill 3, score 1 which is the lowest score of the TOEFL iBT test; in fact, the percentage of the use of clause complexes was 350 %¹, and Drill 3 sample writing had a total of 4 clause complexes out of total 14 clauses. And Level 2 sample writing out of the 13 sample writings, had the lowest percentage of the use of clause complexes. It contained 46 clause complexes out of total 52 clauses, so the percentage of the use of clause complex is 113%. The sample writings of Drill 3 score 1 and Level 2 writings have remarkable features. Both of the writing samples relatively score lower than the other sample writings. The average use of clause complexes is 179%. Therefore, 350% use of clause complexes of Drill 3 score 1 is a remarkable percentage of the use of clause complexes.

Drill 3 score 1 writing is mainly organized to explain the writer's thesis, and the text is organized with the *first*, *second*, and *last* sequence. 350% use of clause complexes shows an intricate text organization, and according to Halliday (2004), a complicated clause complex pattern is characteristic of casual conversation, not for written texts. Therefore, the text organization of Drill 3 score 1 is the same type as spoken discourse, and it is graded lower.

Level 2 writing sample is considered a lower score in the all sample writings, but in regard to clause complexes, this sample writing is organized with a lower percentage use of clause complexes; therefore, even though there are various aspects to compose better written

¹ I followed the clause complex percentage calculation recommended in SFG. The percentages here were obtained by dividing the number of clauses by the number of clause complexes. For example, if one single clause complex contains three tactic clauses, the percentage of clauses in this clause complex was calculated to be 300%.

texts, from the perspective from the analysis of clause complexes, Level 2 writing sample is composed in a more ideal way as a written text.

2.5 LOGICO-SEMANTIC RELATIONS

The previous section discussed the tendency to use clause complexes at each level. Now we will focus on the tendency to use logico-semantic relations. The tendency of logico-semantic relations can show how the different levels of writers organize the text flow.

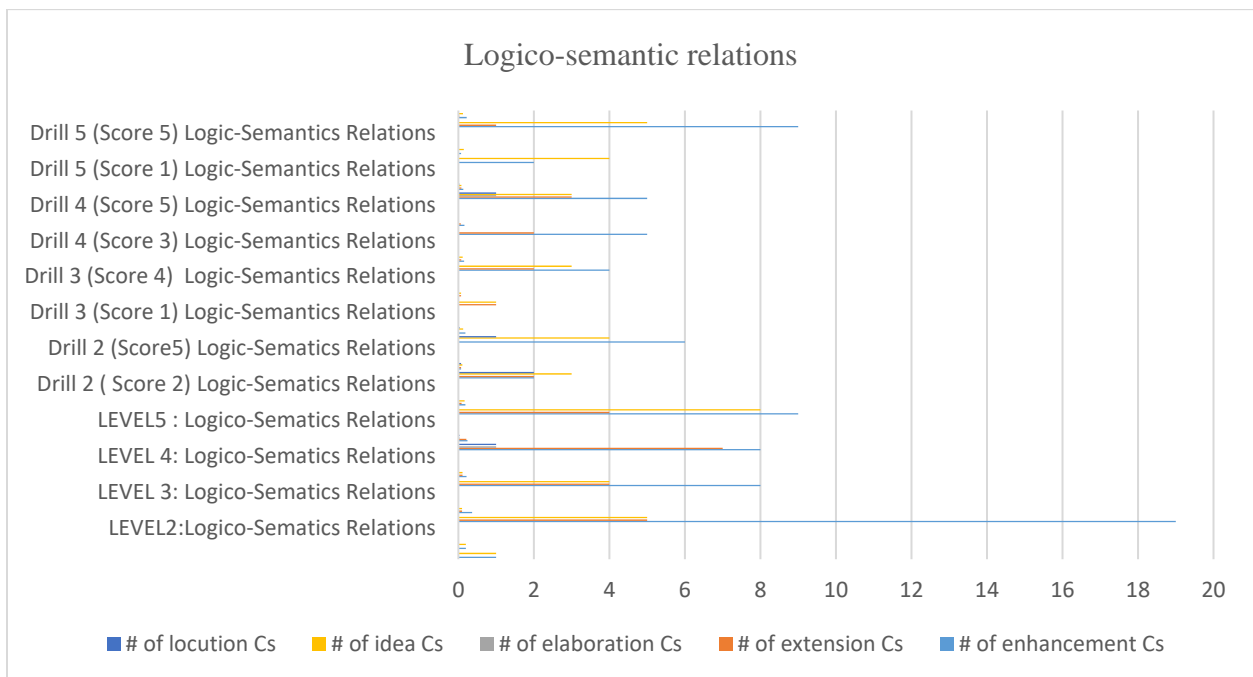


Figure 3. Use of Logico-Semantic Relations

Figure 3 shows that the use of logico-semantic relations: enhancement, showing cause, result, time and place, is the most frequently used type by various levels of writers, and the clausal meaning of logico-semantic relations of ‘idea’ is the second most frequently used, and the third most frequently used type of logico-semantic relation is that of extension, which functions to add more information. Except the Level 2 writing sample, in the higher scored writing samples, such as Drill 5 score 5, Drill 4, score 5, Drill 2, score 5, and Level 5, the number of

logico-semantic relations are used more frequently than lower score sample writings. In fact, in high score sample writings, Drill 5 score 5, Drill 4 score 5, Drill 2 score 5, and Level 5, enhancement is used more than the other lower score writings.

Table 2. Use of Logico-Semantic Relations of the Highest Score Writing Samples

| | Level 5 | | Drill 2 (Score 5) | | Drill 4 (Score 5) | | Drill 5 (Score 5) | |
|---------------------|---------|------|----------------------|------|----------------------|------|----------------------|------|
| # of enhancement Cs | 9 | 19% | 2 | 7% | 5 | 13% | 9 | 22% |
| # of extension Cs | 4 | 8% | 2 | 7% | 3 | 8% | 1 | 2% |
| # of elaboration Cs | 0 | 0% | 0 | 0% | 1 | 3% | 0 | 0% |
| # of idea Cs | 8 | 17% | 3 | 11% | 3 | 8% | 5 | 12% |
| # of locution Cs | 0 | 0% | 2 | 7% | 1 | 3% | 0 | 0% |
| Total # of Cs | 48 | 100% | 28 | 100% | 38 | 100% | 41 | 100% |

In the highest score writing samples, the average use of enhancement is 15.3%, the average use of extension is 6.3 %, the average use of elaboration is 0.8 %, the average use of idea is 12 %, and the average use of locution is 2.5 %. Even though some of the logico-semantic relations, such as elaboration and locution, are not used in the sample writings, the highest writing samples are composed with various types of logico-semantic relation types, and especially, the use of enhancement is prominent. Therefore, the text flow of these highest score writings is composed with time, cause, and reason based writing style.

Table 3. Use of Logico-Semantic Relations of the Lowest Score Writing Samples

| | Level 1 | | Drill 3 (Score 1) | | Drill 5 (Score 1) | |
|---------------------|---------|------|-------------------|------|-------------------|------|
| # of enhancement Cs | 1 | 20% | 0 | 0% | 2 | 7% |
| # of extension Cs | 0 | 0% | 1 | 7% | 0 | 0% |
| # of elaboration Cs | 0 | 0% | 0 | 0% | 0 | 0% |
| # of idea Cs | 1 | 20% | 1 | 7% | 4 | 14% |
| # of locution Cs | 0 | 0% | 0 | 0% | 0 | 0% |
| Total # of Cs | 5 | 100% | 14 | 100% | 28 | 100% |

In the lowest score writing samples, the percentage of the use of logico-semantic relation

is relatively lower than in the highest score writing samples. The average use of enhancement is 9%, the average use of extension is 2.3%, the use of elaboration is 0%, the use of idea is 13.6%, and the use of locution is 0%. The use of logico-semantic relations of the lowest score writing score is much lower than that of the highest score sample writings. Moreover, the most frequently used logico-semantic relation types is that of ‘idea’; therefore, the tendency of text organization type of the lowest scores is “I think that” and “I believe that” forms.

Table 4. Use of Logico-Semantic Relations of Scores 2 to 4

| | Level 3 | | Level 4 | | Drill 2 (Score 2) | | Drill 3 (Score 4) | | Drill 4 (Score 3) | |
|---------------------|---------|------|---------|------|----------------------|------|----------------------|------|----------------------|------|
| # of enhancement Cs | 8 | 22% | 8 | 24% | 2 | 7% | 4 | 15% | 2 | 7% |
| # of extension Cs | 4 | 11% | 7 | 21% | 2 | 7% | 2 | 8% | 0 | 0% |
| # of elaboration Cs | 0 | 0% | 1 | 3% | 0 | 0% | 0 | 0% | 0 | 0% |
| # of idea Cs | 4 | 11% | 0 | 0% | 3 | 11% | 3 | 12% | 4 | 14% |
| # of locution Cs | 0 | 0% | 1 | 3% | 2 | 7% | 0 | 0% | 0 | 0% |
| Total # of Cs | 37 | 100% | 33 | 100% | 28 | 100% | 26 | 100% | 28 | 100% |

In the intermediate level, the scores range from 2 to 4. Most test takers are graded in these levels. The average use of enhancement is 15%, the average use of extension is 9.4%, the average use of elaboration is 0.6%, the average use of idea clauses is 9.6 %, and the average use of locution clauses is 2%. The result shows that the use of enhancement meanings of logico-semantic relations is 0.25% lower than the average percentage of the highest scores, but the average use of the extension of logico-semantic relations is 3.95% higher than the highest score. Therefore, the text flow style of the intermediate level is composed with adding information with some prepositions and adverbs.

2.6 GRAMMATICAL METAPHORS

The use of grammatical metaphor increases according to the target language fluency; in

other words, high level writers tend to use more GMs.

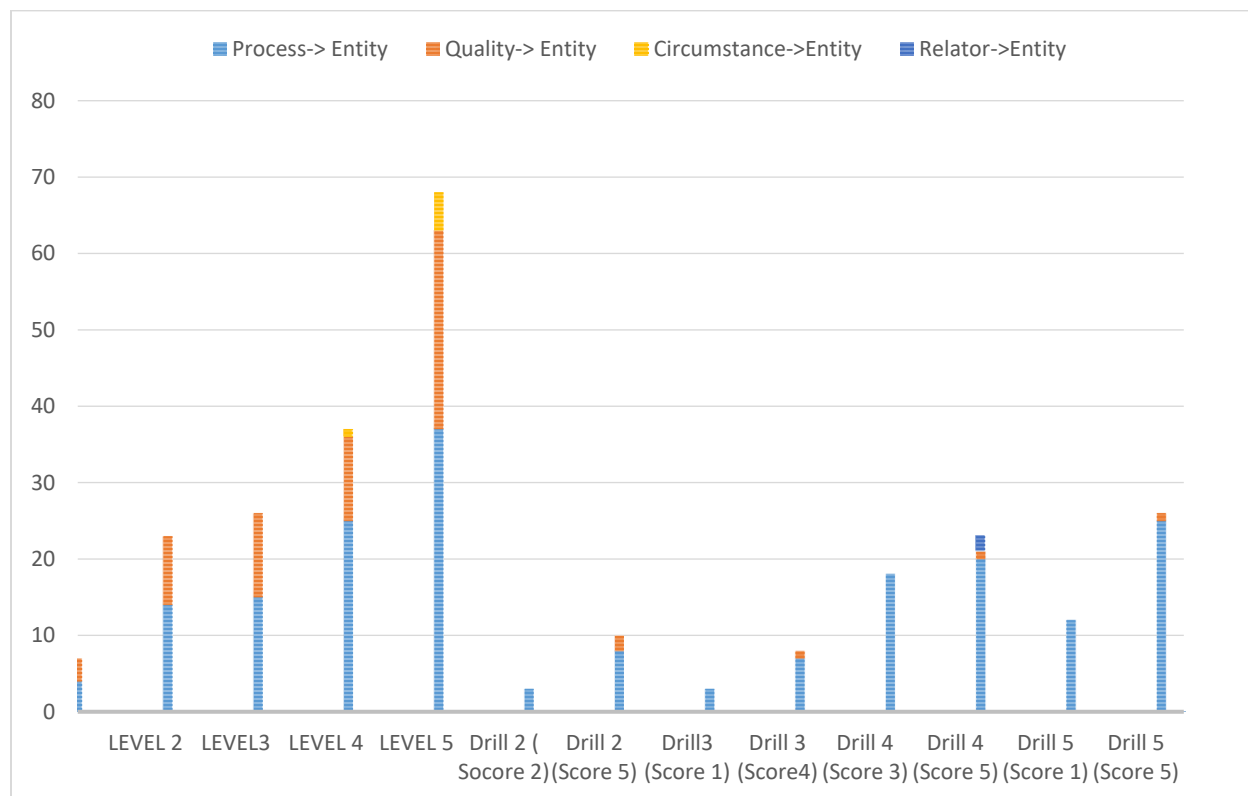


Figure 4. Use of GMs

In all the sample writings, the most frequent GM type is from process to entity; in fact, the average use of GM type from process to entity is 5.4 %. The other uses of GM types, such as ‘from quality to entity,’ ‘from interpersonal to entity,’ ‘from circumstance to entity,’ and ‘from relator to entity,’ are much lower than the GM type from process to entity. In fact, the average use of GM from quality to entity is 1.7%, the average use of GM from interpersonal to entity is 4.6%, the average use of ‘from circumstance to entity’ is 0.7%, and the average use from relator to entity is only 0.08%. Therefore, the GM type used most frequently in all levels is from process to entity.

Next, we focus on the tendency to use GM depending on each level. The highest scores of the sample writings are Level 5, drill 2 score 5, Drill 4 score 5, and Drill 5 score 5.

Table 5. Use of GM of the Highest Score Writing Samples

| | Level 5 | Drill 2 (Score 5) | Drill 4 (Score 5) | Drill 5 (Score 5) |
|-----------------------|---------|-------------------|-------------------|-------------------|
| Process → Entity | 8.4% | 2.7% | 6.5% | 7.9% |
| Quality → Entity | 5.9% | 0.7% | 0.3% | 0.3% |
| Interpersonal | 1.1% | 2.0% | 0.3% | 1.9% |
| Circumstance → Entity | 1.1% | 0.0% | 0.0% | 0.0% |
| Relator → Entity | 0.0% | 0.0% | 0.6% | 0.0% |

The most prominent feature of GM use in the highest score writings is the use of GM from process to entity. Each percentage of the use of GM from process to entity of the highest score is higher than the total average of the use of GM from process to entity; in fact, the percentage of the use of GM from process to entity of the total average percentage is 5.4 %, and the average use of GM from process to entity in the highest score writings is 6.3%. Therefore, the use of GM from process to entity is the highest out of the 5 GM shifts.

The use of GM from quality to entity doesn't have prominent differences from the total average use of GM from quality to entity; in fact, the total average percentage of GM use from quality to entity is 1.7%, and the average percentage of the use of GM from quality to entity of the highest score sample writings is 1.8%. Therefore, it might be safe to say that the GM shift from quality to entity is a less frequently used pattern for various kinds of levels.

The percentage of the use of GM shift from interpersonal to entity in the highest score writing samples is relatively lower than the total average percentage of the use of GM from interpersonal to entity; in fact, the average percentage of the use of GM from interpersonal to entity is 1.25%, but the total average percentage of GM shift from interpersonal to entity is 4.6%. From the data, the actual use of GM shift from interpersonal to entity is 3.35% lower than the total average of the percentage of GM shift from interpersonal to entity.

The average GM shift from circumstance to entity of the highest score of writing samples is 0.25%, and the total average of GM shift from circumstance to entity is 0.7%. This result shows that the highest writing samples includes less GM shift from circumstance to entity.

The total average GM shift from relator to entity is 0.08%, and the average percentage of the use of GM shift from relator to entity is 0.25%. GM shift from relator to entity is seen only in Drill 4 score 5. Therefore, the use of GM shift from relator to entity is the least used type out of all GM shift types.

The next focus point of GM is the tendency of the lowest score writing samples.

Table 6. Use of GM of the Lowest Score Writing Samples

| | Level 1 | Drill 3 (Score 1) | Drill 5 (Score 1) |
|-----------------------|---------|-------------------|-------------------|
| Process → Entity | 7.8% | 2.9% | 6.7% |
| Quality → Entity | 5.9% | 0.0% | 0.0% |
| Interpersonal | 0.0% | 1.0% | 1.7% |
| Circumstance → Entity | 0.0% | 0.0% | 0.0% |
| Relator → Entity | 0.0% | 0.0% | 0.0% |

The average use of GM shift from process to entity is 6%, and the total average of the use of GM shift from process to entity is 5.4%, so the percentage of use of GM shift from process to entity is somewhat higher than the average percentage of the use of GM shift from process to entity, but 0.3% lower than the highest score writing samples.

The percentage of the use of GM shift from quality to entity in the lowest score writing samples is 2%. This percentage is 0.3% higher than the total average percentage of GM shift from quality to entity.

The percentage of the use of GM shift from interpersonal to entity is 1%, and this result is 3.6% lower than the total average use of GM shift from interpersonal to entity, and 0.25% lower

than the highest score writing samples. Therefore, the use of GM shift from interpersonal to entity is less frequently used in the lowest score writing samples.

The percentage of the use of GM shift from circumstance to entity of the lowest score writing samples is 0%, and the total average use of GM shift from circumstance to entity is 0.7%, and the highest score of GM shift from circumstance to entity is 0.25%. The percentage of the use of GM shift from relator to entity is also 0 %.

Next, the intermediate levels, such as Level 3, Level 4, Drill score 2, Drill 3 score 4 and Drill 4 score 3, are focused on in the next section.

Table 7. Use of GM of the Intermediate Score Writing Samples

| | Level 2 | Level 3 | Level 4 | Drill 3 (Score 4) | Drill 4 (Score 3) |
|---------------------|---------|---------|---------|----------------------|----------------------|
| Process→Entity | 3.8% | 4.8% | 7.2% | 3.2% | 8.1% |
| Quality→Entity | 2.5% | 3.5% | 3.2% | 0.5% | 0.0% |
| Interpersonal | 1.1% | 1.3% | 0.9% | 2.3% | 0.0% |
| Circumstance→Entity | 0.0% | 0.0% | 7.7% | 0.0% | 0.0% |
| Relator→Entity | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

The average percentage of the use of GM shift from process to entity of the intermediate level writing samples is 4.8%. This number is lower than the percentage of the highest score and the lowest score and the total average percentage.

The average percentage of the use of GM shift from quality to entity of the intermediate level writing is 1.4%. This result shows that the use of GM shift is higher than the lowest score percentage of 0.2%, and lower than the highest score percentage of 1.8%, and the total average percentage of 1.7%.

The percentage of the use of GM shift from interpersonal to entity of the intermediate level score writing samples is 1%. This percentage is 3.6% lower than the total average score of

the writing samples, and the same percentage as the lowest score writing sample, and 1.8% lower than the highest score wiring samples. Therefore, the percentage of the use of GM shift from interpersonal to entity is at the same level as the lowest score writings.

The percentage of the use of GM shift from circumstance to entity of the average of the intermediate level writings is 1.6%. This result shows that GM shift from circumstance to entity of the intermediate level holds the highest percentage. Actually, the percentage of the total average is 0.7%, the highest score writings is 0.25%, and the lowest writing score is 0%.

Finally, the percentage of the use of GM shift from relator to entity of the average of the intermediate level score sample writings is 0%. This percentage is the same as the average of the lowest score writing samples, and 0.25% lower than the average percentage of the highest score writing samples, and 0.08% lower than the total average.

This analysis, from the GM perspective, reveals the tendency of the high score writing. In order to get a better score on the TOEFL writing test, especially the integrate section, the frequent use and appropriate ways of using GM is effective. Even though some of GM shifts, such as GM from circumstance to entity and GM from relator to entity tend to be used less frequently, the average of the highest score writings includes most of GM shift types, and the average of the intermediate level of sample writings has only one 0% of GM use, relator; in other words, all the other 5 GM shifts are used. And in case of the average of the lowest scored sample writings, GM shifts from circumstance to entity and from relator to entity are not used at all. Therefore, the higher the score of test-takers, the higher the use is of the variety of the types of GM shift.

2.7 LEXICAL DENSITY

In order to investigate lexical density, Ure's method was applied, and the percentage of

lexical density in all the sample writings was 44% of the total number of words. Now we focus on the average percentage of the use of lexical density in the highest, the lowest, and intermediate level of writings.

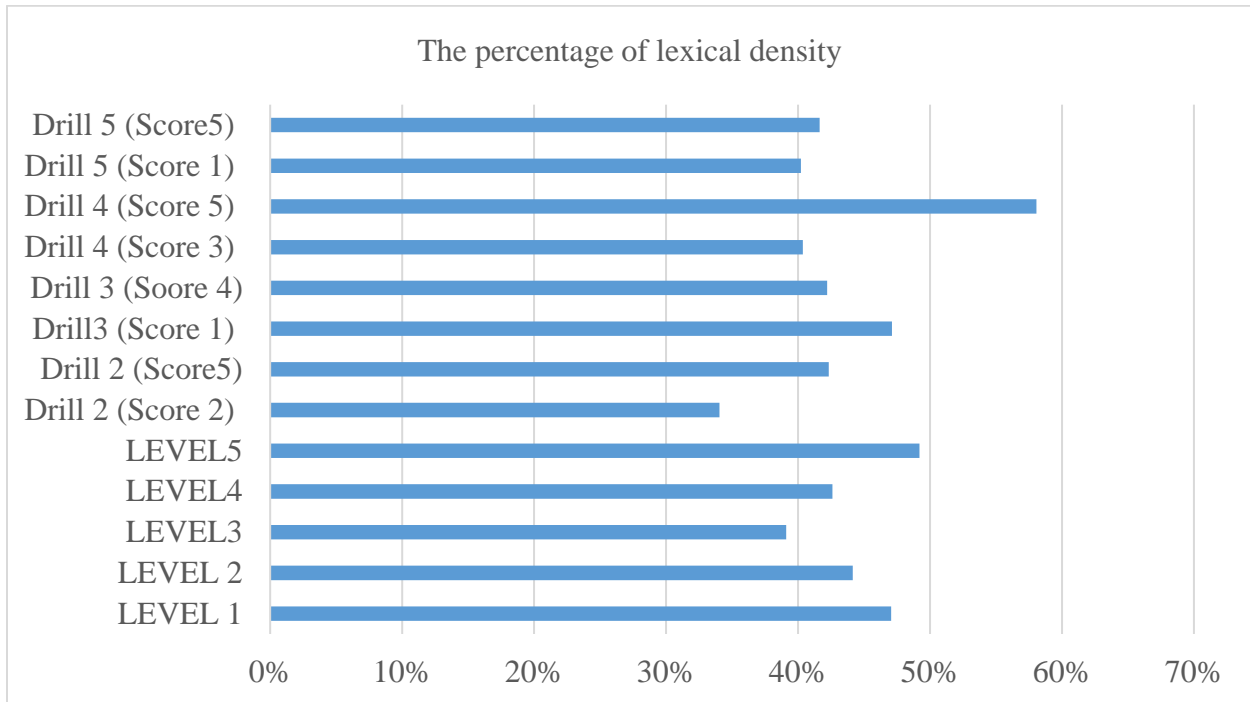


Figure 5. Percentage of Lexical Density

Table 8. Percentage of Lexical Density of the Highest Score Writing Samples

| | Level 5 | Drill 2 (Score 5) | Drill 4 (Score 5) | Drill 5 (Score 5) |
|---------------|---------|-------------------|-------------------|-------------------|
| Lexical Items | 49% | 42% | 58% | 42% |

The percentages of the lexical density in the sample writing are Level 5 at 49%, Drill 2 Score 5 at 42%, Drill 4 Score 5 at 58%, and Drill 5 Score 5 at 42%, so the average lexical density of the highest score is 4% higher than the total average percentage of lexical density.

Table 9. Percentage of Lexical Density of the Lowest Score Writing Samples

| | Level 1 | Drill 3 (Score 1) | Drill 5 (Score 1) |
|---------------|---------|-------------------|-------------------|
| Lexical Items | 47% | 47% | 40% |

As Table 9 shows, the percentages of lexical density in the lowest score writings are 47% in Level 1, 47% in Drill 3 Score 1, and 40% in Drill 5 Score 1, and the average percentage of the lowest score is 45%. This result shows that the average percentage of lexical density of the lowest scores is 3% lower than the highest average of lexical density, and 1% higher than the average percentage of lexical density of the intermediate score writings.

Table 10. Percentage of Lexical Density of the Intermediate Score Writing Samples

| | LEVEL 2 | LEVEL3 | LEVEL4 | Drill 2 (Score 2) | Drill 3 (Score 4) | Drill 4 (Score 3) |
|---------------|---------|--------|--------|----------------------|----------------------|----------------------|
| Lexical Items | 44% | 39% | 43% | 34% | 42% | 40% |

Table 10 shows the percentages of lexical density of the intermediate level writing samples. Level 2 writing sample uses 44% of lexical density, Level 3, 39%, Level 4, 43%, Drill 2 Score 2, 34%, Drill 3 Score 4, 42%, and Drill 4 Score 3, 40%. The average percentage of lexical density of this intermediate score writings is 40%. This percentage is 8% lower than the average percentage of lexical density in the highest scored writing samples; and 5% lower than the average percentage of lexical density in the lowest scored writing samples. Therefore, this result shows that the use of lexical density of intermediate level writings tend to be lower.

The perspective from lexical density indicates that in order to get a higher score on the writing section of TOEFL iBT test, the frequent use of lexical density is effective, for the highest score writing samples include more than 48%; therefore, the frequent use of lexical items can be an effective way to compose higher level and sophisticated writings.

2.8 CAUSALITY

The tendency to use causal items has some similarities and differences according to the level of writing scores.

Table 11. Use of Causal Items of the Highest Score Writing Samples

| | Level 5 | Drill 2 (Score 5) | Drill 4 (Score 5) | Drill 5 (Score 5) |
|---------------|---------|-------------------|--------------------|-------------------|
| Adverbial | 23% | 22% | 13% | 24% |
| Verbal | 4% | 16% | 5% | 2% |
| Nominal | 6% | 3% | 3% | 2% |
| Prepositional | 0% | 3% | 11% | 5% |

Table 12. Use of Causal Items of the Intermediate Score Writing Samples

| | Level 2 | Level 3 | Level 4 | Drill 2 (Score 2) | Drill 3 (Score 4) | Drill 4 (Score 3) |
|---------------|---------|---------|---------|-------------------|-------------------|--------------------|
| Adverbial | 13% | 16% | 15% | 25% | 19% | 13% |
| Verbal | 12% | 3% | 12% | 11% | 15% | 3% |
| Nominal | 2% | 3% | 0% | 0% | 4% | 3% |
| Prepositional | 8% | 0% | 18% | 0% | 15% | 6% |

Table 13. Use of Causal Items of the Lowest Score Writing Samples

| | Level 1 | Drill 3 (Score 1) | Drill 5 (Score 1) |
|---------------|---------|-------------------|--------------------|
| Adverbial | 40% | 21% | 14% |
| Verbal | 0% | 7% | 0% |
| Nominal | 0% | 7% | 0% |
| Prepositional | 20% | 14% | 4% |

In case of the highest score writings, the most frequently used causal item is the adverbial type, such as *therefore* and *because*; in fact, the average percentage of the use of adverbial is 21%, and the highest percentage of adverbial is 24% of Drill 5 Score 5. The average of the use of adverbials, including Level 1, Level 2, Level 3, Level 4, Level 5, Drill 2 score 2, Drill 2 Score 5, Drill 3 Score 1, Drill 3 Score 4, and Drill 4 Score 3, Drill 4 Score 5, Drill 5 Score 1, and Drill 5 Score 5, is 20%.

Moreover, even though the percentage of the use of the verbal elements of the intermediate level writings is 9%, the percentage of the highest score writing is 7%, and the average percentage of the use of verbal is also 7%, so their percentage is the same. But in the

case of the lowest scored writings, the use of verbal elements is only 2%. Therefore, the most frequent use of the verbal elements of causality is seen in the intermediate score writing samples.

In the case of the typical type of causality, the average use of nominal elements is 3%, and the average frequency of nominal elements of causality of the highest score is 4%.

Therefore, the most frequent use of nominal elements of causality is seen in the highest score writing samples.

Finally, in the case of the percentage of the use of prepositional elements, the average use of prepositional causality is 8%, and the average use of prepositional elements of the highest score writings is 5%. In terms of the use of prepositions of causality, the lowest score of writing samples uses the highest percentage; in fact, the percentage is 13%. The intermediate level writing samples obtain an average of 6%, and this percentage is 7% lower than the lowest score writing samples. Therefore, the most frequent use of prepositional elements of causality is seen in the lowest score writings.

This analysis indicates that the use of various kinds of causal types is seen especially in the highest score writing samples. Even though Level 5 writing sample has 0% of prepositional types of causality, the highest scored writing samples use all kinds of causal items; however, in the case of the intermediate the lowest level of writing samples, they miss several types of causal elements, such as verbal and nominal elements. In fact, in Level 1 and Drill 5 Score 1, none of the writing samples includes verbal and nominal types, and in the case of the intermediate level writing samples, they use no nominal and prepositional types. In case of Drill 2 Score 2 sample writing, it uses neither nominal not prepositional elements. This result indicates that in order to get a higher score, there might not exist certain favorable patterns of the use of causal types, but the use of various kinds of causal items within a text is effective.

CHAPTER 3

RESULT

In this thesis, I have presented the results of the analysis of 13 sample writings in the TOEFL iBT writing section in order to seek features of the highest score writings to get a higher score in the writing section and to seek a better way of teaching the TOEFL iBT writing section. As analytic tools, some perspectives from systemic functional linguistics were applied because its theory allows the researcher to investigate lexico-grammatical features that compose each text.

The analyzed TOEFL practice textbook, *Cracking TOEFL iBT 2016 and 2017 edition*, presents the writing section strategies, such as how to manage time, what kind of topic test takers will encounter, how to compose a written text; moreover, this practice textbook provides templates to organize independent task sections. The example is shown below:

| Paragraph 1 : Introduction | |
|----------------------------------|---|
| Topic sentence | The issue at hand is (choice offered by the prompt) |
| Interpret the prompt | This issue is (difficult/ important) because (what is important/ difficult about the prompt). |
| Tie reason #1 back to the thesis | I believe (state your choice), is the better option because (reasons you believe your option is preferable). |

| Paragraph 2: Body paragraph | |
|------------------------------|--|
| Transition/ first reason | (Your choice of options) is preferable because (reason #1) |
| Detail | (detail about reason #1) |
| Tie reason #1 back to thesis | I believe (state your choices), is better option because (reasons you believe your opinion is preferable). |

| Paragraph 3: Body paragraph | |
|------------------------------|--|
| Transition/ second reason | Additionally , (your choice of opinions) is better because (reason #2) |
| Detail for reason #2 | (detail about reason #2) |
| Tie reason #2 back to thesis | I believe (state your choice) is better because (reasons you believe your opinion is preferable). |

| Paragraph 4: Body paragraph | |
|------------------------------|---|
| Transition/ third reason | Based on (details about reason #3) is the right choice because (reason #3) |
| Detail for reason #3 | (detail about reason #3) |
| The reason #3 back to thesis | Finally, I think (state your choice), is the right choice because (reasons you believe your options is preferable). |

| Paragraph 5: conclusion | |
|----------------------------|--|
| Transition/ restate thesis | Ultimately, I feel that (your choice) is the correct one. |
| Final State | I believe this because (why you believe your choice is best). |

(adapted from TOEFL iBT 2017 Edition, p. 429)

Even though this practice textbook indicates the importance of the number of words, how to organize ideas and how to manage time, and shows the template that presents how to organize texts, the text practice textbook does not introduce other kinds of organizational patterns; in other words, other kinds of phrase or causal items are not introduced.

Even though common sense suggests that the highest score writing should include a higher number of words used, and that the structure is composed in a sophisticated way, the practice textbook introduces fundamentally structure-based ways of composition. Therefore, the research question in this study aimed to discover the tendency of how grammar, structure, and styles of writing are used in conjunction to create a particular way of writing.

3.1 RESULT OF CLAUSE COMPLEX AND LOGICO-SEMANTIC RELATIONS

The result of the analysis of clause complexes demonstrates that the tendency of the highest score writings includes various kinds of logico-semantic relations, such as enhancement, extension, and elaboration. In fact, the average percentages of the use of enhancement, extension, elaboration of the highest score writing samples are 15.25%, 6.25%, 0.75%, 12%, and 2.5%. The average percentages of the logico-semantic relations in the lowest score writings of logico-

semantic relations such as enhancement, extension, elaboration, idea, and locution are 9%, 2.3%, 0%, 13.6%, and 0%. The average percentages of the use of the logico-semantic relations of the intermediate writing samples are enhancement 15.25%, extension 9.4%, elaboration 0.6%, idea 9.65%, and locution 2%. The lowest scored writing samples do not include elaboration and locution at all, but both of the intermediate and the highest scored writings use all of logico-semantic types. Even though the average percentage of the use of extension of the intermediate level is 3.15% higher than the highest scored writing samples, the average percentage of the highest scored writing samples is higher than the other levels of the writing samples. Thus, in order to get a higher score for the TOEFL iBT writing section, using various kinds of logico-semantic relations becomes necessary. In fact, the average percentage of the use of GM shift of process to entity type is 5.8%, and in the case of the highest score, the same GM shift is 6.3%, so the highest score is 1.5% higher than the average percentage of the total use of GM shift from process to entity. The average percentage of the GM shift from quality to entity is 1.9%, and the highest scored writing samples include 1.8% of the GM shift from process to entity. So the highest scored writings mark 0.1% lower than the average percentage of the use of GM shift from quality to entity.

3.2 RESULT OF GM

In the case of the percentage of the use of GM shift from interpersonal to entity, the highest score marks 1.3%, and the average percentage of GM is 1.1%, so the highest score sample writings mark 0.2% higher than the average use of GM shift from interpersonal to entity. The percentage of the use of GM shift from circumstance to entity of the highest score writing samples is 0.3%, and this result is lower than the average percentage of the use of GM shift of circumstance to entity.

And finally, the average use of the GM shift from relator to entity is 0.2%, and the total average percentage of the use of GM shift from relator to entity is 0.1%; moreover, this GM shift is rarely used except in the highest score writing samples. Therefore, even though some of the highest scored writing samples do not include all kinds of GM shifts, the highest scored writings covers all kinds of GM shifts. From this result, we can see that using certain kinds of GM shifts is not effective. For example, Level 1 writing sample includes 7.8% of GM shift from process to entity, and the percentage of the GM shift from quality to entity is 5.9%. These percentages are higher than the average total average percentages, but in the case of the other types of GM shift, the percentages are all 0%. Therefore, in order to get a higher score for the writing section, from the perspective from GM, using all kinds of GM can be effective.

3.3 RESULT OF LEXICAL DENSITY

The result of the analysis of lexical density demonstrates that the total average percentage of lexical density is 44%. The average percentage of lexical density in the highest scored sample writing is 48%, so this percentage is higher than the total average percentage. Therefore, in order to get a higher score on the TOEFL writing section, it is effective to use more lexical items.

3.4 RESULT OF CAUSALITY

The result of the analysis of causality demonstrates that the total average percentages of the use of each causal type is 21% for adverbials, 7% for verbal elements, 3% for nominal elements, and 8% for prepositional elements. The average percentages of the use of causal items in the highest score writing samples are 21% adverbials, 7% for verbal elements, 4% for nominal elements, and 5% for prepositional elements. Even though the average percentage of the use of the prepositional elements in the highest score writing samples is 3% lower than the total

average of the use of prepositional elements, the percentage of the other causal items of the highest score writing samples, such as adverbial, verbal, and nominal, is higher than the total average percentage of the other causal items. In order to get a higher score on the TOEFL writing section, the use of various kinds of causal items might be effective.

CHAPTER 4

DISCUSSION AND CONCLUSION

On the basis of these results, we can say that traditional TOEFL textbooks may suffer from some deficits of explanations. The TOEFL practice textbook introduces the template to organize composition, but it does not mention effective writing strategies based on a reconfiguration of grammatical meanings. Especially, in terms of the templates of composition styles, the textbook shows just a few adverbial types, but actual sample writings in the practice textbook present various types of causal types. Therefore, TOEFL practice textbooks might benefit from adding better writing strategies from the perspective from SFG. GM theory can also be applied to reading strategies because academic readings include various kinds of GM, and non-native English speakers need to be familiar with how to unpack GMs to understand texts.

This analysis has shown that systemic functional analyses can provide us with many hidden linguistic features in various kinds of texts. Exploring and applying the SFG theory to language textbooks is beneficial in that language learners can go beyond the traditional style of language practice, simply memorizing the composition templates; and simple memorization of a template may not always lead to an effective way of expressing one's ideas clearly.

Even though it should be noted the results of the analysis in this study may not be generalizable to every published TOEFL preparation book, and further research is certainly needed that applies similar types of analysis to increase the quality and value of the content of language practice textbooks, this study might in a small way help to develop ways of producing a more effective way of teaching how EFL texts are organized.

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APPENDIX A: LETTER FROM INSTITUTIONAL RESEARCH BOARD



Office of Research Integrity

February 6, 2018

Yuki Nakamura
2001 6th Ave, Apt 1313
Huntington, WV 25703

Dear Ms. Nakamura:

This letter is in response to the submitted thesis abstract entitled "*Systematic Functional Analysis of TOEFL Sample Writings – For Teaching Better Ways of Writing.*" After assessing the abstract, it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study does not involve human subjects as defined in the above referenced instruction, it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and a determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,



Bruce F. Day, ThD, CIP
Director

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