

**The Language Analysis of Syntactic
Structures
Embedded in TOEFL Reading
Comprehension Passages
and
The Language Achievement of
Kasetsart University Students both
Prior to and Following Their
Undergoing a One-semester TOEFL
Course¹**

Chariya Pholprasert²

Abstract

The purposes of this research were to analyze the syntactic structures embedded in TOEFL reading comprehension passages and to assess the achievement of Kasetsart University students both prior to and following their undergoing a one-semester TOEFL course.

The author started her research by analyzing each sentence in the reading comprehension passages that were used as practice questions and in the exam paper that was used as both the pre-test and the post-test on the basis of core parts of the main clause.

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² Dr. Chariya Pholprasert, Associate Professor, Dept. of Foreign Languages
ดร.จรียา พลประเสริฐ รองศาสตราจารย์ สาขาวิชาภาษาอังกฤษ ภาควิชาภาษาต่างประเทศ

The various types of sentences were also identified together with their embedded sentence elements that were considered necessary. To show the extent of the questions being asked in the reading comprehension part of TOEFL analyzed, the author carried out a frequency analysis of all the stated and implied questions of each passage and gave the expected answers in bold type for better understanding.

To determine the TOEFL achievement of Kasetsart University students, the author had stated a hypothesis as a basis for further investigation. Match-paired t-test was used to analyze students' pre- and post-test scores at the .05 level of significance. The result of the students' achievement supported the stated hypothesis, which implies that any student undergoing a one-semester TOEFL course, studying the 3 sections of TOEFL— Listening Comprehension, Structure and Written Expression, Reading Comprehension and Vocabulary—will achieve a higher standard.

Since this research involved both the syntactic analysis and the TOEFL achievement of the learners, the author wanted to find the questions that caused her students problems in the reading comprehension part of the exam paper, and to illustrate the relationship of her analysis to their reading achievement so as to enable her to provide sound and valuable suggestions later. She then made a summary by carrying out a frequency analysis of the various types of main clauses and dependent clauses embedded in the constructions analyzed. The items on which the students' correct answer was lower than 50 percent were considered problems for her students. When they were checked with the syntactic analysis of the relevant reading parts that provided the expected answers, it was found that the syntactic points that hindered her students turned out to be mostly simple sentences with various kinds of phrase modifiers and some idioms embedded. Some complex and compound-complex sentences with various dependent clauses embedded were problems for their understanding of the printed material as well.

The results of this research also showed that, since the reading comprehension part of TOEFL asks both stated and implied questions, a good knowledge of syntactic structures could help the students understand what they read and enable them to choose the correct answers better. The correct answers to the implied questions have to include the mastery of adequate vocabulary of various academic fields together with reading techniques, i.e. how to draw fair inferences, how to find suitable topics or titles, or how to check supporting details.

On the whole, TOEFL has various techniques to elicit foreign students' capability of mastering the English language. In order to achieve high TOEFL exam results, especially in the reading comprehension part, the examinees should have a clear understanding of the printed matter. They must be able to pinpoint the main cores of each construction as well as the various sentence elements embedded. It is hoped that the results of the syntactic analysis and the TOEFL achievement of Kasetsart University students in this research will

be of great use to Thai students, teachers of English as well as compilers of English instructional materials for pedagogical purposes.

Key words: Syntactic Analysis, Reading Comprehension, TOEFL

Analytical Exposition

Statement of Purpose

The purposes in conducting this research were to analyze the syntactic structures embedded in TOEFL reading comprehension passages and to assess the achievement of Kasetsart University students both prior to and following their undergoing a one-semester TOEFL course.

Rationale

Since TOEFL (Test of English as a Foreign Language) is a standardized test, used to assess the language proficiency of foreign students whose native language is not English, it is of great interest to the author. She, then, offered course 355261, entitled “English for Standardized Tests: TOEFL” in the first semester of the 1991-1992 academic year. This is an elective course for all Kasetsart undergraduate students, who have fulfilled the three pre-requisite English courses required by the university. Graduate as well as doctoral students can also enroll in this course.

The students who sit for TOEFL will have the opportunity to demonstrate their English proficiency in three major skills—Listening, Reading, and Writing. For the aforementioned skills, the mastery of syntactic structures can enhance their reading and writing skills if they have a good understanding of the forms and functions of strings of words used in each construction (Pholprasert, 1992) .

Those who achieve a better understanding of the printed matter of each academic field should master the terminology, the complicated language constructions, and the reading techniques (Dardarnanda et al, 1992). The reading comprehension part in Section 3 of TOEFL provides contexts from various sources and academic fields. After each reading passage, the examinees must choose the one best answer from the four choices given, on the basis of what is stated as well as of what is implied.

Since the mastery of the syntactic structures is a necessity for the students’ reading comprehension, the author, then, analyzed the syntactic structures embedded in TOEFL

reading comprehension passages and found the syntactic points which hindered her students in their understanding of the printed matter. At the same time, the author wanted to assess the language achievement of her students both before and after receiving the TOEFL instruction from her for one semester as well. The findings will hopefully be of great use to both the teaching and learning of English as a foreign language, and to those who are preparing themselves to further their studies at the advanced levels both at home and abroad.

Definition of Terms

For the purpose of this research, the following terms were provided :

1. **Language Analysis** is the syntactic analysis of the English language, sentence by sentence, on the basis of core parts in the main clause and of the various embedded sentence elements.
2. **Syntactic Structures** refer to English structural points, the patterns of arrangement of words and parts of words in sentences (Hornby, 1976).
3. **Reading Comprehension Passages** are the TOEFL passages used for practice questions as well as for the Exam Paper.
4. **Language Achievement** is the TOEFL achievement, the result of the students' ability to choose the correct answers to all the questions of the 3 sections in the Exam Paper that was used as both the pre-test and the post-test.
5. **Kasetsart University Students** were the three groups of undergraduate as well as post-graduate students of Kasetsart University who enrolled in the TOEFL course in the second semester of the 1992-1993 academic year, and in the first and the second semester of the 1993-1994 academic year, which totalled 124 students altogether.
6. **One-semester TOEFL Course** is the course in which the students have to attend at least a 45-hour course, studying the three major sections of TOEFL with the author.
7. **Simple Sentence** contains the core parts and has only one finite verb that shows both tense and voice distinctions. There can be various kinds of phrase modifiers embedded, but not the dependent clauses (Shaw, 1986).
8. **Compound Sentence** contains two or more simple sentences combined by coordinating conjunctions.
9. **Complete Sentence** consists of a main clause and one or more dependent clauses.
10. **Compound-complex Sentence** includes two or more coordinate clauses, along with one or more dependent clauses.
11. **Dependent Clauses** refer to noun, adjectival, and adverbial clauses. They are usually introduced by a conjunction and function like a noun, an adjective, or an adverb.
12. **Appositive** refers to an explanatory word or phrase, either adjective or noun, added

immediately before or after the headword. There is usually a comma before and/or after (Wood, 1981). In this research, participials both present and past, used as qualifiers either preceding or following the headword, are also analyzed as appositives.

Scope of the Research

This research primarily emphasized the language analysis of syntactic structures embedded in reading comprehension passages compiled by the author for use as a textbook for the 355261 course (Pholprasert, 1994) as well as for the exam paper. At the same time, in order to show the whole picture of the students' achievement both prior to and following their undergoing a one-semester TOEFL course, each group of the samples in this research had to take both the pre-test and the post-test by doing the same exam paper. The author, with computer assistance, used the method of Match-paired t-test at the .05 level of significance to determine their achievement.

In order to illustrate the relationship of her syntactic analysis to the students' reading achievement, the author found the questions that caused problems in the reading comprehension part of the Exam Paper and checked them with the relevant syntactic analysis of the constructions that provided expected answers so that she would be able to give sound and valuable suggestions.

Hypothesis

Because of the nature of this research, the following hypothesis was given as a basis for further investigation: "The language achievement of Kasetsart University students following their undergoing a one-semester TOEFL course is improved."

Assumptions

Since this research involved both the syntactic analysis and the students' achievement of TOEFL, the author felt it necessary to make the following assumptions to fulfill her purpose in carrying it out:

1. For a better understanding of the syntactic analysis in this research, it was assumed that the readers had mastered the basic functions of all parts of speech, whether they are in the forms of words, phrases, or clauses. Any string of words with multi-functions would be notified to avoid confusion.
2. The students who enrolled in the TOEFL course were assumed to have the same English background since they would have fulfilled the three pre-requisite English courses required by the university before taking the course. Only those who had attended the

- 45-hour course, studying the three sections of TOEFL with the author were eligible to do the exam paper. Therefore, their achievement could be objectively assessed.
3. All the reading comprehension passages analyzed were considered reliable since all of them came from the TOEFL Program Office and were assumed to cover all the syntactic constructions stated in the Kasetsart University syllabus for the course entitled "English for Standardized Tests : TOEFL." They comprised passages of particular interest and practical value for classroom learning.

Discussion of Operational Aspects

1. For the language analysis of syntactic structures embedded in reading comprehension passages and in the exam paper, the author analyzed each sentence on the basis of core parts of the main clause (Burton, 1985). In her analytical process, various types of sentences were also identified, followed by introductory sentence elements, non-finites, and other embedded sentence elements that were considered necessary to the better understanding of the printed matter of the students. Each string of words analyzed was primarily referred to in its forms whereas its function was identified in parentheses.
2. In order to show the extent of the questions being asked in the reading comprehension part analyzed, the author carried out a frequency analysis of all the items by, first, identifying the two main types of questions (Direct or Open-ended), and then tallying stated questions (which include vocabulary, inference, reference, and topic or title). The expected answer to each question was also given in bold type for better understanding.
3. To determine the language achievement of Kasetsart University students both before and after their undergoing a one-semester TOEFL course, the author found out the students' t-pre-test and post-test scores, and with computer assistance, she used Match-paired test (Walpole, 1990) at the .05 level of significance to verify whether the stated hypothesis would be accepted or rejected.
4. Since TOEFL is a standardized test, not a teacher-made one, the author did not intend to judge the quality of TOEFL by means of item-analysis. But to examine the items that caused her students' problems in the reading comprehension part, she kept a tally of the number of students choosing the correct answer to each question of this part in the exam paper and tabulated it in the form of a percentage. In her opinion, after receiving a one-semester TOEFL instruction from the author, in which the problem areas were emphasized, half of the students were expected to get the tested items correct. Thus, the difficulty level (DL) of the reading test was determined

at the level of 0.50 (TenBrink,1974). Therefore,the items with lower than 50 percent of correct answers were considered the areas of learners' problems.

5. Lastly, to illustrate the relationship of her syntactic analysis to the students' reading achievement, the author carried out a frequency analysis of the various types of sentences and dependent clauses embedded to show the whole scope of the constructions analyzed and checked the problematic questions with the relevant reading parts that provided the expected answers.

Integration

Conclusions

Since all the practice questions and the exam paper came from the actual TOEFL administration, we can see that TOEFL employs various techniques to test foreign students' ability to show great skills at listening, writing, and reading the English language. The author hopes that the syntactic analysis in this research will encourage Thai students to realize the importance of the forms and the functions of any strings of words they encounter, especially when they read printed material. This will ensure an improved understanding of what is being read. In addition, when they have to write in English, they will be more careful to choose the right strings of words to express the meaning they want to convey. As a result, their writing skill will also be improved.

From the assessment of the students' ability to do the exam paper, the author found that the achievement of Kasetsart University students following their undergoing a one-semester TOEFL course was, for the most part, better than prior to their undergoing it. This, therefore, leads to the acceptance of the stated hypothesis. The following sound conclusions based on the data collected can be made:

1. Of all the TOEFL reading comprehension passages of the practice questions analyzed, it was concluded that of the 308 sentences analyzed, there were 121 simple sentences, 94 complex sentences, 47 compound sentences, and 46 compound-complex sentences. The dependent clauses embedded comprised 81 adjectival clauses, 73 adverbial clauses, 56 noun clauses, and 7 verbless clauses. Among the 73 adverbial clauses mentioned, there were 23 time clauses, 17 reason clauses, 11 condition clauses, 10 comparison clauses, 5 manner clauses, 5 concession clauses, and 2 purpose clauses accordingly.

Of all the reading comprehension passages of the exam paper analyzed, it was

concluded that of the 37 sentences analyzed, there were 15 complex sentences, 14 simple sentences, 4 compound sentences, and 4 compound-complex sentences. The dependent clauses embedded comprised 15 noun clauses, 12 adjectival clauses, 7 adverbial clauses, and 2 verbless clauses. Among the 7 adverbial clauses mentioned, there were 2 time clauses, 2 concession clauses, 1 comparison clause, 1 reason clause, and 1 manner clause.

While analyzing all the reading passages mentioned above, the author also noted and accumulated the following interesting English language features which were considered necessary to a better understanding of the printed matter: the idioms appearing in the reading passages analyzed, nouns in the forms of V+ing, adjectives in the forms of participials, and phrasal verbs.

In this research, the author also gave the whole form of the Exam Paper with the expected answer to each question in bold type together with the transcript of the listening section for better understanding.

2. The extent of the questions being asked in the reading comprehension part of TOEFL can be concluded as follows:

Of all the questions in the practice questions, there were 107 direct questions and 101 open-ended questions, with 2 questions not scored. Among them, 114 questions asked about stated details and 94 were implied questions. Of the 94 implied questions, 55 questions concerned inferences, 19 questions titles or topics of the passages read, 13 questions tested vocabulary, and 7 questions references.

Of the 30 questions in the Exam Paper, there were 21 direct questions and 9 open-ended questions. Among them, 12 questions asked about stated details and 18 were implied questions. Of the 18 implied questions, 9 questions concerned inferences, 5 questions titles or topics of the passages read, 2 questions tested vocabulary, and 2 questions references.

It can be summarized that among the implied questions, drawing fair inferences has been asked most, followed by finding appropriate titles or topics of the passages read, vocabulary, and references consecutively.

3. The result of Match-paired t-test analysis showed the evidence supporting the research hypothesis statistically at the .05 level. Therefore, it implies that any student undergoing a one-semester TOEFL course, practising the 3 sections of TOEFL, will achieve a higher standard.
4. The number of items on which the students' correct answer was lower than 50 percent were considered problematic questions. These were numbers 39, 42, 57, 59, and 60.
5. The author had checked the afore-mentioned problematic questions with the relevant syntactic analysis of the reading parts that provided the expected answers and the

relevant questions being asked. Eventually, it was noted that the cause of her students' problems in their understanding of the printed matter turned out to be mostly simple sentences with many phrase modifiers and some idioms embedded. Some complex and compound-complex sentences also hindered their clear understanding of the printed matter. Therefore, the teacher should emphasize various forms of phrase modifiers, dependent clauses, and American idioms while teaching. Supplementary exercises concerning the problematic syntactic structures mentioned above should be provided to attain the best language results for the Thai learners.

Suggestions

It is hoped that the results of the language analysis of syntactic structures embedded in TOEFL reading comprehension passages and the assessment of the students' TOEFL achievement in this research will be of great use to Thai learners, teachers, and compilers of English instructional materials. The following suggestions are made based on the results of the syntactic analysis and the TOEFL achievement of Kasetsart University students as follows :

1. The Thai learners who are preparing for the coming TOEFL must be conscious of the main cores of the English construction—subject, verb, object or complement—because each main core can be enlarged by various kinds of modifiers in the forms of either phrases or clauses. If the learners cannot pinpoint the main cores of each construction, they will not be able to know what syntactic points are being used in that construction. They will then get lost and not thoroughly understand the printed matter, and hence cannot get the correct answers to the questions being asked. The syntactic analysis in this research can help the Thai learners understand the various types of sentences and dependent clauses as well as other English language features that appear in the reading texts, so that they will pay special attention to what causes them problems and have enough time to remedy their mistakes so as to be better prepared for a TOEFL.
2. Before teaching, the teachers should know which English syntactic points are going to confront the learners most often. This research revealed that the syntactic points that caused the Thai learners turned out to be simple sentences with various kinds of phrase modifiers and some idioms embedded. Therefore, while teaching, the teachers should stress all forms of phrase modifiers together with their functions, which include prepositional phrases, infinitive phrases, gerundive phrases, participial phrases, adjectival phrases, and noun phrases. The dependent clauses, which include noun clauses, adjectival clauses, and adverbial clauses, should be given special attention to as

well. Taking all these into account, the teachers should teach from the shorter strings of words to the longer ones—from the easier to the more difficult. With a contrastive analysis of the mother tongue and the English language, the teachers should also be acquainted with those syntactic points that cause their learners' difficulty. They should emphasize those syntactic points while teaching and allow the learners opportunity to practice them in class.

3. The compilers of English instructional materials for foreign learners should also be aware of the frequencies of syntactic points that will confront the learners so that they can arrange their lessons and exercises in a manner relevant to TOEFL. They should know which English syntactic points will confront the learners most so that they can arrange their instructional materials from the easier to the more difficult ones. Besides, to improve the learners' reading skill, the compilers of English instructional materials should add some more exercises concerning the reading techniques such as how to draw fair inferences, how to find appropriate titles or topics, as well as how to check supporting details in the reading comprehension passages for the learners to practice until they are able to pinpoint the expected answers correctly.

Recommendations for Further Study

From this research, the author foresees the relationships of some aspects in TOEFL that she would like to recommend for further study. They are:

1. The Language Analysis of Syntactic Structures Embedded in Listening Comprehension Passages in Relation to the Listening Achievement of the Thai Learners
2. The Study of Students' Vocabulary Knowledge Affecting Their Reading Comprehension Achievement

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