A COMPARISON OF ENGLISH COMPOSITIONS
BY NATIVE AND NON-NATIVE SPEAKERS

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ABSTRACT

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This study examined aspects of the writing perfor-
mance of 144 native English speakers in Grades 6 through 11,
and 181 French-speaking learners of English as a second
language (ESL) in Grades 9 and 11. Compositions describing
the action in a film were analyzed for a number of features:
overall length, syntactic complexity (as determined by T-unit
and error-free T-unit measures), frequency and types of
errors, and lexical choice.

The analysis of overall length and of T-units revealed
that, although the older ESL group wrote the longest composi-
tions, when mean T-unit length (and especially mean error-
free T-unit length) was calculated, the syntactic complexity
of the compositions of the ESL learners was far below that
of much younger native speakers.

The investigation of errors revealed that, while the
older ESL learners wrote much more, the same types of errors
appeared with almost the same relative frequency in the compo-
sitions of the older and younger ESL groups. Errors of the
same type as those appearing in ESL learners' compositions
also occurred in the native speakers' writing, but the over-
all frequency was much lower.

The analysis of lexical choice showed that the ESL
writers used more general and imprecise lexical items more
frequently than the native speakers. There was evidence of
transfer from French in the ESL compositions, but there were
also cases where acceptable cognates were not used.

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CHAPTER I

INTRODUCTION

The purpose of this thesis is to contribute to research on the assessment of proficiency in second language writing. This study was undertaken to investigate the writing performance of learners of English as a second language (ESL) by comparing it to that of native English speakers, through the examination of a variety of features in the writing of both groups.

Background

A recent three-year longitudinal study[1] of ESL learners in Quebec schools yielded a great deal of data on the students' second language development. Over this period oral language samples from 176 subjects, both in their ESL class and performing an oral communication task outside of class, were recorded, transcribed and analyzed.

In order to further investigate the second language development of these formally-instructed learners, and to compare it to their oral performance, written data were also collected from some of the subjects. Both oral and written data from English native speakers of a comparable age and background were also obtained. These data were used to verify the instruments used in the research and to investigate possible explanations for differences in usage between the native and non-native speakers. Descriptive compositions written by the ESL learners and the native English speakers form the data base for the present study.

The writing of the various groups in this study will be described first on measures of length - including those which are said to reflect syntactic complexity. Then, an investigation of grammatical correctness - that is, the type and frequency of the errors in the writing of both ESL learners and native speakers of English - will be presented. Last, there will be a brief discussion of differences and similarities in lexical choices.

Plan of the Thesis

In the rest of this chapter a summary of previous research into the assessment of syntactic development in writing will be presented. This will include a discussion of the literature on: (1) syntactic development in the writing of native speakers of English, (2) the use of objective measures of length and syntactic complexity to gauge language proficiency in ESL writing, and (3) investigations and comparisons of the writing of native and non-native speakers of English and other languages. This will be followed by a description of the scope of the present study and the research questions it addresses.

In Chapter II, the subjects and procedures for the collection and analysis of the data will be described. The results of the analysis will be given in Chapter III. These results will be discussed in Chapter IV, and in Chapter V the investigation will be summarized and suggestions for further research will be offered.

The Assessment of Syntactic Ability

The measurement of growing language proficiency has long been a concern of researchers. There has been considerable interest in the development of a convenient,

efficient and reliable indicator of this growth, which would permit teachers as well as researchers to determine features common to the writing of groups of learners at various levels of proficiency. Recently, some measures have been developed to examine syntactic growth. These measures were first applied to the language of native speakers of English and have subsequently been used to assess the language of learners of ESL.

Syntactic Development in the Writing of Native Speakers of English

Traditionally, one measure of growing syntactic ability was sentence length. It was thought that more mature writers would write more complex, and therefore longer, sentences. However, this measure proved an unreliable indicator of increased syntactic skill, since it did not take into account such features as the excessive coordination common in the language of younger writers. A sentence such as "John got up and he ate his breakfast, then he brushed his teeth and he went to school but it was Saturday so the school was closed and then he went home" is impressively long but not very sophisticated syntactically. There is no use of subordination, embeddings or any of the other various transfor-

mations that characterize the writing of more mature writers.

The shortcomings of the sentence length measure led to the development of another measure, called the "T-unit" (minimal terminable unit) by Hunt (1965) or "communication unit" by Loban (1976). A T-unit is defined as a main clause plus its modifiers (including subordinate clauses). Therefore, such a sentence as: "I met a man/ and he was wearing pink pyjamas" would consist of two T-units, while "I met a man who was wearing pink pyjamas" would be considered one T-unit.

There have been a number of extensive studies of the syntactic development - as measured by mean T-unit length - of the language of native English-speaking school children. Loban (1976), in a 12-year longitudinal study of the language development of over 200 school children, found that average communication unit length increased, both in speech and in writing, as the students matured. Hunt (1965) studied the language of school children at three grade levels (Grades 4, 8 and 12) as well as the writing of adult professional writers. O'Donnell, Griffin and Norris (1967) in a study of the syntax of kindergarten and elementary school children

also used the T-unit measure. All these studies indi-
cated that there was a signficant increase in T-unit
length at higher grade levels (although not necessarily
from one year to the next). They concluded that increased
T-unit length reflects increased syntactic complexity.
This complexity is a result of increased subordination,
embeddings and modification - the ability to include
more information in a T-unit through the use of more
sophisticated syntactic transformations.

One of the concerns of these researchers, along
with developing and validating an efficient and reliable
indicator of syntactic growth, was to determine which
syntactic structures were common to writers at various
stages of development. One way the different transfor-
mations were examined was through the use of a rewrite
passage - particularly one developed and used by O'Donnell
(1968) and commonly known as the "Aluminum Passage" - in
which students were asked to combine short sentences to
make longer ones.

One outcome of this analysis of the language of
English-speaking school-children has been the recommenda-
tion to include more sentence combining exercises in the
school curriculum to accelerate the development of

syntactic skill. Experimental evidence (as reported by Hunt (1977)) has shown greater syntactic growth in the writing of students instructed in this way, as compared to those not so instructed.

T-Unit Analysis of the Language of ESL Learners

A recent direction of research with second language learners has been towards the validation of T-unit measures as indicators of overall proficiency in the second language. This area of investigation has been pursued by researchers who wanted to find a convenient and reliable measure that would serve as an "index of development" - one that would make it easy to assess and compare all ESL learners (Larsen-Freeman, 1979). If students who had the highest scores on, for example, the TOEEL examination (test of English as a foreign language) were also shown to write the longest T-units, then it might be possible to evaluate overall skill in the second language by simply calculating T-unit length in writing samples. But since second language learners are unlike native speakers of English in that they produce more errors, researchers have developed measures of error-free T-units (EFTUs) as well as the original T-unit measures used to investigate native speakers' writing.

Scott and Tucker (1974) studied the language of Arabic-speaking ESL learners and found an increase over time in the percentage of EFTUs they produced, in both oral and written data. They also found that the overall T-unit length of these learners increased over the period of time of the investigation (one term of intensive English instruction) - from a level comparable to Grade 5 to a Grade 7 level in the studies of native speakers.

In a cross-sectional study, Larsen-Freeman and Strom (1977) looked at many factors that contribute to writing ability; including features that make compositions more "native-like" (such as writing mechanics and organization), errors and measures of length including T-units and EFTUs. Compositions were assigned to one of five proficiency levels based on holistic ratings. The researchers concluded that the most promising measures on which to base an index of development were mean T-unit length and number of EFTUs, since they were easy to quantify and seemed to indicate some linear progression. A follow-up study (Larsen-Freeman, 1979) confirmed the trend towards a greater number of EFTUs at higher proficiency levels. As well, there were significant differences on the mean length of EFTUs for each of the

five proficiency levels. In this case, students' levels were determined by overall scores on a university entrance placement examination.

Vann (1979), studying both the oral and written language of Arabic-speaking students, also found that measures taking errors into account best correlated with proficiency level as measured both by holistic ratings and TOEFL scores. A similar conclusion was reached in a study by Perkins (1980). Number of EFTUs, their mean length, number of errors per EFTU and total number of errors per composition all were good discriminators of proficiency level as determined by holistic ratings. Two studies by Sharma (1979, 1980) also concluded that measures including error, particularly mean length of EFTU, appeared to be the most promising indicators of proficiency since they correlated best with both holistic ratings and university entrance test scores.

In other studies, the usefulness of regular T-units alone as indicators of proficiency has been investigated. Kameen (1979, 1981) found that simple T-unit length correlated significantly with proficiency levels as determined by holistic ratings. In a study of 300 compo-

sitions written by ESL students at six levels of proficiency, Flahive and Snow (1980) found that mean T-unit length alone appeared to correlate well with proficiency level (determined by holistic ratings). Neither of these studies looked directly at EFTUs.

In other cases, even the usefulness of mean T-unit length as an indicator of proficiency might be called into question. Arthur (1979) found that the measure that correlated best with teacher rankings of compositions was overall length. In a study of the linguistic maturity of native-speaking eleven year-old schoolchildren, Richardson, Calnan, Essen and Lambert (1976) found that productivity (i.e., overall length) was strongly related to teachers' ratings of their pupils on a variety of measures of scholastic aptitude, whereas there was a very weak relation between these rankings and mean T-unit length.

Comparisons of the Writing of Native and Non-Native Speakers of English

There are few studies in which the writing proficiency of second language learners has been directly compared to that of monolingual native speakers. In an experiment, involving bilingual (English-French and

English-German) and native English-speaking schoolchildren,
Braun and Klassen (1973) showed that T-unit length was
greater for all groups at higher grade levels (Grade 6
compared to Grade 4). Overall, however, the monolingual
English students were superior to the other groups in all
the measures used, including T-unit length.

Compositions written on a similar topic by fifteen
college ESL learners and fifteen native speakers of
English (also college students) were compared by Perkins
and Leahy (1979). Although the native speakers wrote
considerably more EFTUs and made fewer errors per T-unit
than the ESL learners, the researchers found that the
difference in mean EFTU length between the two groups
was not significant.

Syntactic Development in the Writing of Learners and Speakers of Languages other than English

Some research has also been undertaken into the
development of writing proficiency, or growing syntactic
skill, in languages other than English. Hunt (1977)
reported that studies using rewrite passages with
speakers of various Asian languages revealed similar
patterns of syntactic growth and emerging syntactic

features to those found in the studies of native speakers of English.

Monroe (1975) investigated the syntactic development of college students learning French. A rewrite passage was administered to students from freshman to graduate status, as well as to a group of adult native speakers. A number of objective factors of syntactic development were measured. There was a trend for mean T-unit length to be greater at higher levels, with significant differences being found at two-year intervals, and between graduate students and native French speakers.

A similar investigation of the writing of four levels of college learners of German and German professional writers was conducted by Cooper (1976). There was an increase in T-unit length across the five levels, with significant differences between any two-year intervals and between graduate students and the native-speaking journalists. Comparing his results to those of Hunt, Cooper reported that his subjects showed a more rapid growth in syntactic development than the English-speaking schoolchildren of Hunt's study. Both Monroe

and Cooper found that increases in T-unit length in
the writing of their second language learners were
based on the use of syntactic devices similar to those.
which increased the T-unit length of first language
learners.

Criticisms of T-Unit Analysis

There has been some criticism of T-unit analysis
by both first and second language researchers. O'Donnell
(1976), in pointing out the limitations of the use of
T-unit measures. in first language studies, mentioned
their inconsistency in measuring the structural complex-
ity of the writing of individuals in various modes. He
discussed other models, such as a syntactic density
scale proposed by Endicott (1973). In this scale, dif-
ferent transformations and morphemes are given values.
The totals for these features are divided by the number
of words in the T-unit to give a syntactic complexity
ratio. Although such a measure would pinpoint differences
in T-units, that would otherwise be considered equivalent,
O'Donnell concluded that, to reveal developmental dif-
ferences of groups in a large and diverse enough sample,
an analysis of T-unit length alone, which is much less
complex and equally effective, was preferable.

Gaies (1980) discussed the limitations of T-unit
analysis in second language research. Nevertheless,
he concluded that the T-unit is a more useable measure
than other proposed indices of syntactic complexity,
since it is easy to apply and quantify. To those who
criticized the validity of the T-unit as an overall
index of language proficiency, he pointed out: "All
that is claimed by T-unit analysis-based research is
that learners considered to be at an advanced level
(by the criteria of language proficiency test scores or
language course level) tend to produce longer EFTUs
and a higher ratio of EFTUs to total T-Units" (p. 57; but
see Larsen-Freeman, 1979). He mentioned the necessity
of collecting several samples of data from individuals
since variation in stylistic choice can cause varying
T-unit length. Gaies also stated that T-unit analysis
can be useful to reflect similar stages in syntactic
development in native and non-native writing. But he
noted that one difference in the quality of native and
non-native writing is that errors occur in second language
data that do not in first language data, and with much
greater frequency. For this reason, T-unit analysis
may not be appropriate for use with subjects at low
levels of proficiency where the incidence of error is

so high as to interfere with understanding and the
ability to tabulate T-units.

Scope of the Present Study

This study of the free writing of ESL learners and
native speakers of English is intended to investigate
a number of research questions which arise from previous
investigations of writing proficiency, particularly in
the area of syntactic development.

The ESL learners whose writing was analyzed in
the studies described in the review of previous research
were all at college or college entrance level, that is,
studying or about to begin studying in universities
where English was the principal or only medium of instruc-
tion. As such, they were more mature learners of ESL
than the high school learners whose writing was examined
in this study. Therefore, the first question to be
addressed is:

1. the applicability of measures of length, includ-
ing T-units and EFTUs, to the writing of learners in the
early stages of their ESL development.

There has been considerable interest in the validation of these measures as indicators of overall proficiency in the second language. The next question, then, concerns:

2. the usefulness of such measures as indicators of syntactic development and proficiency in ESL for the subjects of this study.

There has been little research on the comparability of the writing of native and non-native speakers and learners of English, particularly when the subjects were of elementary and high school age. Another aspect of this study is:

3. the determination of similarities and differences in syntactic complexity in compositions written by first and second language learners and the extent to which the writing of certain groups of non-native speakers is comparable to that of certain native speakers.

Finally, as was reported above, since analyses of length do not cover all the differences between native and non-native speakers, one part of this investigation will describe:

4. differences in "quality" - as measured in the

frequency and type of errors, as well as some lexical
choices - between the writing of native English speakers
and ESL learners.

CHAPTER II

SUBJECTS AND PROCEDURES

The subjects can be divided into two main groups:
native speakers of English (NS) and French-speaking
learners of English as a second language (NNS).

Non-Native Speakers

As described in Chapter I, the NNS were part of a
group of formally instructed second language learners
whose English language development was followed in a
three-year longitudinal study. The results of two
language exposure questionnaires administered to these
students indicated that their exposure to English outside
the classroom was, for most, very limited (therefore the
main source of input of the second language was in the
classroom).

The NNS attended French-language secondary schools
near Montreal and were in Secondary III (Grade 9) and

Secondary V (Grade 11)[1] at the time of data collection.
English instruction began in Grade 5 for most of them,
and they received two hours of instruction a week in
elementary and 3-4 hours a week in secondary school.
The texts used by most of the learners were Look, Listen
and Learn in elementary and the Lado English series
(Canadian edition) in secondary school. In general,
English classes were very strongly text-based and there
was little opportunity for the students to participate
in free and communicative language activities.

There were 58 Grade 9 (NNS9) and 123 Grade 11
(NNS11) in the NNS group. Of these, 39 Grade 9 (NNS9L)
and 27 Grade 11 (NNS11L) form a sub-group of subjects
whose language development was followed for all three
years of the longitudinal study. These groups are kept
separate in this study since some of the measures to be
reported were applied only to the writing of the longi-
tudinal subjects and not to that of the entire NNS9 and
NNS11 groups.

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[1]In Quebec, the designations Secondary I-V - equivalent
to Grades 7-11 elsewhere in Canada - are used for the
years of secondary schooling. For consistency, arabic
numerals will be used to refer to grade levels through-
out this thesis.

Native Speakers

The native speakers of English were elementary
and secondary students from English and French language
schools in the Montreal area and English language schools
in Trail, British Columbia. The data were collected[2] in
the fall of 1979 from a group of 13 Grade 8 (NS8) and
11 Grade 10 (NS10) students at an English language high
school in Montreal; in early 1980 from 25 Grade 6 (NS6E)
students in an English school and 24 Grade 6 students in
a French school (NS6F), both near Montreal; and in fall
1980 from 35 Grade 9 (NS9) and 36 Grade 11 (NS11) students
in English high schools in Trail, British Columbia. A
complete breakdown of the number of subjects in all
groups, both NS and NNS is presented in Table 1.

In order to determine if English was indeed the
only language of the NS, a questionnaire[3] was adminis-
tered at the time the data were collected. Only data
from those subjects who indicated that English was their
first language and that they did not currently speak
another language as well as they did English were
included in the analysis.

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[2] The data from the NS6F group were collected by Diane Savory;
The data from B.C. were collected by Gabriella Moro.

[3] See Appendix 1 for the questionnaire.

Table 1

Number of Subjects in Each Group

Grade	Native Speakers (NS)	Non-Native Speakers (NNS)
6E	25	–
6F	24	–
8	13	–
9(9L)	35	58(39)
10	11	–
11(11L)	36	123(27)
TOTAL	144	181

NS = native speakers.
NNS = non-native speakers.

Data Collection

Each group of students was shown a 6-minute animated film, a production of the National Film Board of Canada, entitled The Great Toy Robbery. In this film, which is set in the old west on Christmas Eve, Santa Claus is robbed by three outlaws, but his toys are eventually recovered with the unwitting aid of a cowboy "hero". The film is amusing, colourful, full of action and contains practically no dialogue. It was shown twice during a regular class period of approximately 50 minutes. After

the first viewing, students were told: "You will have
5 minutes to make notes on what happened". After the
second, they were asked to write compositions des-
cribing the story. The exact instructions were: "Tell
as much of the story as you can remember. Pretend you
are telling the story to a person who did not see the
film". The students had approximately 30-35 minutes for
the actual writing. No limit was imposed on length.

The handwritten compositions were typed into a
computer and carefully checked and proofread in order to
assure that the printed version conformed in every detail
(spelling, punctuation, spacing and so on) to the origi-
nals. The analyses were carried out on the computer
print-out form.[4]

It should be noted that the instructions given to
the NS9 and NS11 students may have varied somewhat from
those given to the other students. These students were
asked to summarize the action in the film, which may have
led them to write relatively shorter compositions.
Another effect of being told to summarize may have been

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[4]Examples of the original handwritten composition and the
computer print-out form appear in Appendix 2. An example
of a typical composition written by a subject at each
grade level is given in Appendix 3. Anne G. Barkman
wrote the computer programs for the composition format-
ting and word counts.

the tendency for some students in these groups to write
descriptions in note-form, leaving off function words
such as articles. As well, particularly for the NL11
students, writing a straightforward description of the
action without analyzing the content sometimes proved
difficult. In some cases they wrote a critique rather
than a description, adding their own comments and evalua-
tions. Both compositions that were commentaries and
those that were obviously notes rather than complete and
coherent pieces of writing were excluded from the data
pool and were not further analyzed.

The results for the NS compositions to be reported
in Chapter III are for those compositions that described
only the action, in a complete way, and whose writers
were, to the best of our knowledge, "true" native speakers.
The numbers reported in Table 1 are for only these subjects.

Procedures of Analysis

The compositions were first examined for overall
length. Computer-generated word counts gave the total
number of words for each composition. Mean length and
standard deviation for each group of compositions were
then calculated. It should be noted that overall length

includes titles and other extraneous words such as
"the end" that were eliminated from word totals in the
application of subsequent measures.

T-unit analysis. The number of T-units in each
composition was then calculated. In counting T-units,
Hunt's definition of a T-unit as "a main clause plus
whatever subordinate clauses (or other modifiers) are
attached to it" was adhered to. In some cases, in addi-
tion to titles and extra words, the compositions contained
groups of words that were completely unintelligible.
According to Vann (1979), words or phrases that do not
constitute T-units are counted as mazes or garbles. In
this study, the total number of mazes was not calculated,
but all mazes were noted and eliminated from the T-unit
count. Although there will be further discussion of how
T-units and mazes were determined in Chapter IV, it is
important to point out here how the exclusion of mazes
affects counting, especially in calculating mean T-unit
length. For each composition, once the total number of
T-units has been determined, that number is divided into
the total number of words contained in the compositions,
that is, minus extraneous words and words contained in
mazes. If, for example, there were 250 words in a compo-
sition according to the computer word count, and there

were 4 words in the title and 6 words contained in a maze, and the composition contained 12 T-units, then the mean length of the T-units was determined in this manner: $(250 - 10) \div 12 = 20.0$. The mean T-unit length, therefore, was 20 words. An example of the calculation of T-units and T-unit length is given in Figure 1.

The Great Toys Robbery

      The gangsters take the toys of Santa claus./ They go in the saloon and play./ The heroe go in the saloon./ He says: "Can I play too?"/ When the gansters say: Get out. The heroe goes out./ The Santa Claus and the sheriff go in the saloon/ and the gansters and them fight./ When the gangsters go out the saloon, the hero who want to fight his horse with his guitar, assome the gangsters accidentally./ The Santa Claus give him the toy car/ and the heroe goes./

Total Number of Words:	91
Other Words (Title, etc.):	4
Total Number of T-Units:	10
Mean Length of T-Units:	$91 - 4 = 87 \div 10 = 8.7$ words

Figure 1.   Calculation of Mean T-Unit Length.

      This procedure was followed for all the compositions of each group, and a group mean was arrived at by dividing the total number of words contained in T-units by the total number of words in all compositions. In order to

give more weight to the performance of individuals the
group mean was also calculated by adding individual
scores together and dividing by the total number of scores.

Error-free T-units. There are competing definitions
of what constitutes an error-free T-unit (EFTU). Some
researchers (Larsen-Freeman & Strom, 1977; Larsen-
Freeman, 1979; Sharma, 1979, 1980) have counted only
T-units which are perfect in all respects, including punc-
tuation and spelling. Others (Scott & Tucker, 1974;
Vann, 1979) have tolerated orthographic and writing
mechanics errors as long as they did not interfere with
grammatical correctness at the level of morphology and
syntax.

Although there is no question that counting only
"perfect" EFTUs makes the researcher's job much simpler,
such a method would have been inappropriate in the present
study of learners at low levels of proficiency. Restricting
the counting to "perfect" EFTUs would have resulted in a
very small number of EFTUs. As well, one of the aims of
this study was to compare the writing of NNS with that of
NS, and in the research on English-speaking school-
childrens' language development there is no reference to
error-free T-units. It seems unlikely that young native
speakers in the native language research made no spelling

and punctuation errors, yet in these studies when mean
T-unit length was determined, only words contained in
mazes were discarded, and not those in T-units containing
spelling and punctuation errors.

However, one of the difficulties in determining the
"imperfect" EFTU is that, while one can often be confident
that a native speaker's error is simply a spelling error,
this attribution cannot always be made with such con-
fidence when analyzing non-native writing. When a NNS
miswrites sing as sign, should it be counted as a lexical
error? This type of error is not unheard of in NS writing.
In fact, in this study, this particular error occurred in
the writing of both NS AND NNS.

The question of what constitutes a spelling error
and what a more serious one is difficult to resolve. For
the purposes of this study, errors such as the above were
tolerated as long as the change in form did not bring
about a change in grammatical correctness. Therefore,
an error such as heros for hero was not considered simply
a spelling error, since the addition of -s to the English
base morpheme results in a change in grammatical meaning.[5]

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[5] For examples of errors that were tolerated, in both NS and
NNS writing, refer to Appendix 4.

All T-units containing no error were marked and the total number of EFTUs per composition was counted. To arrive at the mean length of EFTUs, all words contained in these units were counted and this number was divided by the total number of EFTUs. An example of the calculation is given in Figure 2. Group means were arrived at

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The Great Toys Robbery

The gangsters take the toys of Santa Claus./ They go in the saloon and play./ The heroe go in the saloon./ He says: "Can I play too?"/ When the gansters say: Get out. The heroe goes out./ The Santa Claus and the sheriff go in the saloon/ and the gansters and them fight./ When the gangsters go out the saloon, the hero who want to fight his horse with his guitar, assome the gangsters accidentally./ The Santa Claus give him the toy car/ and the heroe goes./

Total Number of EFTUs (underlined): 4
Total Number of Words in EFTUs: 27
Mean Length of EFTUs: 27 ÷ 4 = 6.8 words

Figure 2. Calculation of Mean Error-Free T-Unit Length.

both by adding all words contained in EFTUs and dividing by the total number of EFTUs for the group, and by adding individual scores and dividing by the total number of scores.

Errors. Each individual error which occurred in
a composition was circled. The errors were assigned to
categories and totalled. In this study, only errors at
the morpheme and word level were considered, although
there were a few instances of errors in word order which
were also noted. Mechanical errors - including spelling,
punctuation, capitalization, etc. - were not counted,
nor were errors in the use of text features beyond the
sentence (T-unit) level.[6] Scott and Tucker's method of
counting agreement of tense errors only within T-units
was also followed. Different error types were assigned
to categories as new error types were encountered. As
an error occurred that did not appear to fit into an
established category, a new category was created. In
some cases, an error was counted under two categories -
that is, for example, when the error was both lexical
and morphological. The same criteria for judging errors
were applied to both NS and NNS compositions.

Error categories and examples. In general, most of
the errors fell into a few categories while a larger
number of categories containing fewer errors accounted for
the rest. The categories that proved to be most frequent
are discussed below.

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[6]However, in some obvious cases, faulty pronoun reference
was noted.

1. Uninflected verb

The uninflected verb category includes the use of
the base form of the verb in a context where some inflec-
tion (past, simple present, progressive) is required.

   Example: (NNS11L) When he <u>go</u> outside the sheriff
                      <u>arrive</u> with Santa Clause.

      (NS6E)   The cowboy <u>run</u> out and <u>get</u> his horse.

These T-units could be corrected by adding -s/-es
to the verbs or by using a past tense marker or some other
appropriate form of the verb.

2. Lexical errors

  This category includes the use of an inappropriate
lexical item as well as the use of a French word, or a
French word which has been anglicized.

   Example: (NNS9L)   Three <u>stealers</u> are waiting for <u>cambril</u>
                   the Santa Clause.

      (NS8)   He is <u>wished</u> by the mayor and goes on
               to the saloon.

3. Preposition errors

Preposition errors include wrong prepositions, missing
prepositions, or prepositions supplied where none are
required. The incorrect use of verb particles is also
included in this category.

   Example: (NNS9L)   They go down the hill <u>in</u> full speed.
                   Santa Claus gives <u>to</u> them his bag of
                   gifts.

(NS10) · The gang arrive <u>into</u> a saloon where everyone is having a good time.

(NS9L) · The people of the town look ∧ the beautiful tree of Christmas.

4. <u>Articles</u>.

This category includes the suppliance of an article where it is not required, the use of the wrong article, and the failure to supply an article where required.

Example: (NNS11L) And first they meat <u>the</u> Santa Claus and ask him four his bag.

So the Santa Clause gave to him ∧ gift.

The scene of the story is in the far West. In <u>a</u> tough and rugged West.

(NS9) Then they went into ∧ salloon and started to play with the toys.

5. <u>Inappropriate -s</u>

Any case where an -s is added to a word (usually a noun or verb) where it is not required is counted in this category.

Example: (NNS11L) The <u>singers</u> goes in the piano/and the <u>players</u> goes with her.

In the while, the three bandits <u>arrives</u> in the town and shoot in the air.

(NS11) So the cowboy finally gets the message and <u>decideds</u> to leave quickly.

(NNS9L) · Many people wait <u>yours</u> toy.

6. -s Plural missing

All cases when the plural -s morpheme is not supplied where required appear in this category.

Example: (NNS11L) And the Santa Claus comes in the desert with his bag of <u>gift</u>.

In this time the three <u>ganster</u> arrived in the city.

(NS9) And three <u>robber</u> come and rob him of all his toys.

7. Wrong verb form

Under this heading, the use of non-finite verb forms where some finite form is needed, and the wrong non-finite form, such as an infinitive instead of a gerund, are noted.

Example: (NNS9L) But one day Santa <u>comming</u> with his slay and his presents for the small city.

(NNS11L) And they <u>gone</u>.

But, not far from him three men on their horses were <u>looking</u> at him with some binoculares and with the idea to <u>steal</u> his package.

(NS8) The story start of in the desert were Santa Clause <u>was come</u> to town when he get <u>robbery</u> by three bad men.

8. After

This category was created when it was noted that there were frequent occurrences in the NNS data of <u>after</u> used as an adverbial rather than a conjunction. It nearly always

occurred as a sentence introducer.

Example: (NNS9L)   After we saw the "great" cowboy who was singing in the city.

After they play with the toys.

This particular use of after was noted separately and not included in the lexical category since it raised the question of whether or not NS used the term in the same way, in which case there would have been some doubt about considering it an error.[7]

9. Sequence of tenses

As mentioned above, only changes of tense, from past to present for example, within the T-unit were considered sequence of tense errors.

Example: (NNS11L)   He runs out the saloon, took place on his horse and commanded it to move fast.

After, they opened the bag and begin to play with the toys, just like babies!

(NS9)   Santa Clause thanks him and told him he could have a toy.

10. Word missing

The missing word (or words) in this category are normally content words - usually nouns or lexical verbs. Missing functors such as articles and prepositions are

[7]This question will be returned to in subsequent chapters.

included in those categories. Since it is difficult to know what the error is when something is not there, it was often hard to pinpoint exactly what the intention of the writer was.

Example: (NNS9L) The gangsters refuse and tell ∧ (the cowboy?) to get out of here.

They _ (were?) up on the hill.

(NNS11L) And the black ∧ (men?) are watch Santa Claus.

(NS9) The three men came out and on a mistake ∧ (the cowboy?) hit him off the heads with his gutair.

(NS11) As a reward Santa gave him a little red ∧ (car?) and he drove all around.

11. Wrong pronoun

Lack of agreement in number and person as well as wrong case make up the errors in this category. Wrong relative pronouns also are included.

Example: (NNS11L) So the three men took the bottles and drank fit and pitch <u>it</u> on the floor.

After they drink they begin to play with the present <u>who</u> was in the bag.

(NS9) The hero hits <u>him</u> (the robbers) in the head with his gitar.

The above are the major categories into which errors fell, with most of them occurring in the first six categories. Other categories which contained fewer errors are listed below.[8]

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[8] For examples and further discussion of these errors see Appendix 5.

12. Was/were

13. Subject-verb agreement

14. Word order

15. Don't = doesn't

16. Over-regularized past

17. Copula -s missing

18. Wrong possessive adjective

19. have = there is/are

20. Inflected infinitive

21. Missing possessive

22. Man = men

23. Men = man

24. Extra word

25. Over-regularized plural

26. Uninflected past participle

27. Genitive

28. Double subject

29. Miscellaneous

All errors in each category were calculated for each composition and added to make a total for the various groups (all NS and NNS9L, NNS11L).

<u>Measures of content</u>. This study of content was

limited to vocabulary diversity and lexical choice.

A type/token vocabulary ratio was determined for

each NS and the NNS9L and NNS11L groups. The number of

different words in each composition was divided by the

total number of words. Computer word counts which gave

both total number of words and number of different words

were used for this purpose.

A small investigation of different lexical choices

was also undertaken. The terms used to refer to five topic

areas were examined: (1) the cowboy ("hero" of the story),

(2) Santa Claus' toys, (3) "knocking-out" terms, (4) the

robbers, and (5) the act of robbing. These particular

items were selected since they all refer to key characters,

objects, or actions in the story, and it was felt that

most writers who completed the composition would not be

able to avoid using some word or expression to refer to

them.

My interest in this aspect of the study was to see

the diversity of terms employed and to examine any dif-

ferences in lexical use between NS and NNS. For each

composition, the number of <u>different</u> terms used by each

writer in each topic area was determined. The total number
of different terms used by the NS and NNS groups and the
frequency with which they appeared was then compared. To
this end, the percentage of use of a certain lexical item
to the total use of all terms in that topic area by that
group was calculated.

CHAPTER III

RESULTS

In this chapter the findings on all the measures described in Chapter II will be presented. First, measures of length - including T-units and error-free T-units - will be examined. The frequency and ranks of errors will be reported. Finally, the results of measures of content, that is vocabulary diversity and lexical choice, will be given.

Overall Length

Two groups, one of which is a sub-group of the other, had the greatest mean composition length. The NNS11 and particularly the NNS11L group wrote considerably longer compositions on average than any other group, either NS or NNS, as shown in Table 2. The only other group whose average was over 200 words was the NS6F group. NS10 had the next highest average composition length, followed by NS11, NS6E, NNS9L, NS8, NS9 and NNS9. The writing of the two groups with the longest compositions, NNS11L and NNS11, also showed the greatest variation in length.

Table 2

Mean Length of Compositions and Standard
Deviation: All Groups

		NS			NNS	
Grade	n	Mean Length	S.D.	n	Mean Length	S.D.
6E	25	180.2	45.1	–	–	–
6F	24	214.9	79.2	–	–	–
8	13	141.8	46.2	–	–	–
9	35	137.4	60.7	58	126.9	54.5
9L	–	–	–	39	150.9	46.5
10	11	192.0	53.7	–	–	–
11	36	188.1	71.9	123	241.6	88.5
11L	–	–	–	27	295.2	87.4

NS = native speakers.

NNS = non-native speakers.

Number and Mean Length of T-Units

The variation in the number of T-units, shown in
Table 3, for the various groups, generally reflects
variation in overall length. For example, NNS11 students,
who wrote the longest compositions, also wrote the most
T-units. However, NS6 students, whether in an English

Table 3

Average Number and Mean Length of
T-Units per Composition

Grade	Number	Range	Mean* Length	Range
		NS		
6E	21.0	10-35	8.3	5-12
6F	21.1	4-23	9.9	7-13
8	15.7	5-26	8.9	7-11
9	12.0	4-23	11.4	7-20
9L	-	-	-	-
10	17.3	11-31	11.0	8-16
11	15.6	8-49	12.0	8-15
11L	-	-	-	-
		NNS		
6E	-	-	-	-
6F	-	-	-	-
8	-	-	-	-
9	15.3	2-33	7.9	3-13
9L	17.7	8-30	8.1	5-13
10	-	-	-	-
11	25.8	2-52	9.2	5-18
11L	30.2	13-52	9.6	8-13

*Mean length here represents the score for the group, not an average of individual scores. Differences in mean length according to the method of calculation are presented in Table 4.

NS = native speakers.

NNS = non-native speakers.

or a French school wrote virtually the same number of T-units, even though the NS6F students wrote longer, compositions. Similarly, for NS8, NS11 and NNS9, there was a considerable difference in overall length, but the average number of T-units gives a more accurate picture of the differences that exist (see Table 3).

The native speakers tended to write compositions with longer T-units. The longest T-units were written by NS11, followed by NS9, NS10 and NS6F. NNS9 students wrote the shortest T-units. As shown in Table 4, there is not much difference in group means on this measure, whether individual scores are summed and averaged, or the average is arrived at by totalling all words in T-units and dividing by the total number of T-units.

Error-Free T-Units

It is in the calculation of the number and length of error-free T-units that the differences between native and non-native writing become most apparent. As Table 5 shows, although the average number of EFTUs in native-speaker writing for any group is not much lower than the average number of regular T-units, the number of EFTUs is considerably lower for the NNS groups. This discrep-

Table 4

Comparison of Group Means (T-Unit Length)
Using Two Scoring Methods: Group Score
and Individual Scores

	NS		NNS	
Grade	Group	Individual	Group	Individual
6E	8.3	8.5	–	–
6F	9.9	9.9	–	–
8	8.9	9.3	–	–
9	11.4	11.7	7.9	7.8
9L	–	–	8.1	8.1
10	11.0	11.3	–	–
11	12.0	12.0	9.2	9.4
11L	–	–	9.6	9.7

NS = native speakers.

NNS = non-native speakers.

ancy can best be seen by expressing EFTUs as a percentage of
total T-units (see Table 6).

There is a gap of over 40 percent between the least
error-free native speaker writing and the most error-free
NNS writing. Interestingly, of the native speaker groups,
NS wrote fewer EFTUs than the younger, NS6 students.

Table 5

Average Number of Error-Free T-Units and
Mean Length per Composition

Grade	Number	Range	Mean* Length	Range
		NS		
6E	18.9	9-35	8.3	5-11
6F	19.0	3-30	9.8	7-12
8	12.9	5-24	8.6	7-11
9	10.8	2-22	10.6	7-27
9L	-	-	-	-
10	15.6	9-30	10.7	6-16
11	15.1	4-46	11.6	8-15
11L	-	-	-	-
		NNS		
6E	-	-	-	-
6F	-	-	-	-
8	-	-	-	-
9	3.6	0-18	6.6	2-11
9L	5.5	0-18	6.8	4-11
10	-	-	-	-
11	7.1	0-31	7.9	3-13
11L	11.3	1-28	7.9	4-10

*Mean length here represents the score for the group,
not an average of individual scores. Differences in
mean length according to the method of calculation
are presented in Table 7.

NS = native speakers.

NNS = non-native speakers.

· Table 6

Percentage of Error-Free T-Units
to Total T-Units

	NS		NNS	
Grade	Group	Individual	Group	Individual
6E	90	90	–	–
6F	90	89	–	–
8	82	79	–	–
9	90	88	23	20
9L	–	–	31	30
10	90	90	–	–
11	97	94	27	30
11L	–	–	37	35

NS = native speakers.

NNS = non-native speakers.

Note. Group and Individual refer to the two different scoring methods.

The groups are ranked in a similar, order on the mean length of EFTU measure, from a high of 11.6 for the NS11 group to a low of 6.6 for the NNS9 group (as shown in Table 5). In this case, as Table 7 shows, differences on group means according to the method of calculation are considerable for the NNS groups. The lower number arrived at by averaging individual scores can largely be accounted for by the large number of scores of zero (that is, compositions containing no EFTUs). However, although the actual numbers drop if individual scores are taken into account, the relative difference between the

Table 7

Comparison of Group Means (EFTU Length)
Using Two Scoring Methods: Group Score
and Individual Scores

	NS		NNS	
Grade	Group	Individual	Group	Individual
6E	8.3	8.3	–	–
6F	9.8	9.8	–	–
8	8.6	9.0	–	–
9	10.6	11.4	6.6	5.0^1
9L	–	–	6.8	6.0^2
10	10.7	10.9	–	–
11	11.6	11.9	7.9	6.2^3
11L	–	–	7.9	7.5

[1] Includes 10 scores of zero.
[2] Includes 2 scores of zero.
[3] Includes 14 scores of zero.
  NS = native speakers.
  NNS = non-native speakers.

groups (NNS9 and NNS11) changes very little. In order
to determine the significance of these differences between
the two NNS groups, t values were calculated for three
measures – mean T-unit length, mean EFTU length, and
percent of EFTUs. These findings are given in Table 8.

Table 8

Difference on Group Means for Three Measures
(NNS9 and NNS11): T-Unit Length, EFTU Length,
and Percent of EFTUs

Group	n	Mean	S.D.	t-Value	p
		T-Unit Length			
NNS11	123	9.4	1.8	9	<.001
NNS9	58	7.8	1.6		
		EFTU Length			
NNS11	123	6.2	2.9	2.7	<.005
NNS9	58	5.0	2.8		
		% of EFTUs			
NNS11	123	30.4	24.3	3.2	<.001
NNS9	58	20.5	17.0		

NNS = non-native speakers.

There were significant differences on all three measures
between the means of the NNS9 and NNS11 groups. As the
ranges shown in Tables 3 and 5 make clear, there was a
good deal of individual variation within groups on both
mean T-unit and mean EFTU length.

Errors

A detailed calculation of types of errors and their frequency was undertaken for all compositions written by NS and for the compositions written by the longitudinal NNS subjects. The longitudinal subjects were similar to the whole group on those measures of length that included error, and it can be assumed that the types of errors they made were also similar, since the students were of the same background, had the same instruction and were in fact in the same classes.

A breakdown of the frequency of NNS errors in each category is presented in Table 9. NNS11L students made more errors overall, an average of nearly 12 more per composition. Of course, in light of the fact that their compositions were over twice as long as the NNS9L compositions this is not suprising. If the ratio of errors to total number of words is considered, Grade 11 students actually performed slightly better (see Table 10). The same errors (excluding word missing and wrong pronoun) accounted for 86% of the total errors for NNS9L and 83% of the total errors for NNS11L. The most frequent error by far for both groups was the use of an uninflected verb.

Table 9

Errors – Rank and Frequency (NNS)

Rank	Type	Number	% of Total Error
	NNS9L		
1	uninflected verb	169	23
2	lexical	103	14
3	articles	94	13
4	prepositions	80	11
5	plural -s uninflected	62	8
6	inappropriate -s	42	6
7	wrong verb form	37	5
8	after	26	4
9	word missing	17	2
10	sequence of tenses	15	2
	others	85	12
	TOTAL	730	99
	NNS11L		
1	uninflected verb	191	23
2	prepositions	132	16
3	lexical	104	13
4	articles	88	11
5	plural -s uninflected	64	8
6	inappropriate -s	40	5
7	wrong verb form	29	3
8	sequences of tenses	21	2
9	after	20	2
10	wrong pronoun	16	2
	others	118	14
	TOTAL	823	100

NS = native speakers.

NNS = non-native speakers.

Note. Percent may not total 100 due to rounding.

Table 10

Total Number of Errors and Ratio of Errors
to Total Number of Words (NNS)

	Total Number		
	Errors	Words	Ratio
NNS9L	730	5562	.13
NNS11L	823	7472	.11

NNS = non-native speakers.

It is difficult to conceive of native speakers
making errors of the same seriousness and same type as
those of non-native speakers. However, the anomalies
that occurred in their writing were noted and tabulated
for purposes of comparison. Table 11 presents a break-
down of the number of "errors" appearing in all composi-
tions. The greatest average number of errors occurred
in the writing of the NS8 group while NS11 students made
the fewest errors. The type and frequency of errors made
by all NS combined is shown in Table 12. It is interest-
ing that all but one error type (over-regularized past -
e.g., holded, standed) also occurred in the top ten of

Table 11

Total Number of Errors and Average Number of Errors per Composition

	NS		NNS	
Grade	No. of Errors.	Average No. Composition	No. of Errors	Average No. Composition
6E	50	2.0	–	–
6F	53	2.2	–	–
8	41	3.1	–	–
9	67	1.9	–	–
9L	–	–	730	18.7
10	21	1.9	–	–
11	32	0.9	–	–
11L	–	–	823	30.5

NS = native speakers.

NNS = non-native speakers.

one or the other NNS group. The ranks were somewhat different however, with the word missing category occupying the first rank in the NS data. Error ranks for NS and NNS are compared in Table 13. There was a surprising number of errors involving uninflected verbs and the failure to inflect -s plural, and also a considerable number of preposition errors. It should be noted,

Table 12

Errors in NS Compositions - Frequency and
Rank: All Groups Combined

Rank	Type	Number	% of Total Error
1	word missing	36	14
2	plural -s uninflected	35	13
3.5	lexical	34	13
3.5	uninflected verb	34	13
5	sequence of tenses	23	9
6	prepositions	21*	8
7	inappropriate -s	17	6
8	article	14**	5
9	over-regularized past	10	4
10	wrong pronoun	9	3
	others	32	12
	TOTAL	265	100

*Six of these are errors of omission.
**All but two of these are errors of omission.

NS = native speakers.

however, that 6 of the 21 preposition errors and all but

two of the article errors were errors of omission. That

is, the writer left the word out where it was required,

which is a different kind of error from using the wrong

word, or supplying a word where none is required.

Table 13

Comparison of Ranks for Top Ten Error
Categories: NNS and NS

Category	Ranks	
	NNS*	NS
uninflected verb	1	3.5
prepositions	2	6
lexical	3	3.5
articles	4	8
plural -s uninflected	5	2
inappropriate -s	6	7
wrong verb form	7	-
after	8	-
sequence of tenses	9	5
word missing	10	1

*NNS9L and NNS11L

NS = native speakers.

NNS = non-native speakers.

Lexical errors include the misuse of <u>rob</u> for <u>steal</u>
(6 instances) and the lexical item <u>robbery</u> for <u>robber</u>
(8 instances). Such errors also occurred in the NNS
compositions where they accounted for a much smaller
proportion of lexical errors.

Overall, of course, the total number of NS errors
was much lower than the total number of NNS errors. When

the overall incidence of error is so low there appears
to be little justification for treating these writing
slips as true errors. However, it is interesting that
similar error types appeared in both NS and NNS writing,
although the motivation for them may have been different.
This will be further discussed in Chapter IV.

Measures of Content

The measure of vocabulary diversity - type-token
ratio - did not reveal much difference among NS and NNS
groups (see Table 14). This measure is also tied to

Table 14

Type-Token Ratio

Grade	NS	NNS
6E	.47	-
6F	.47	-
8	.53	-
9	.50	-
9L	-	.47
10	.53	-
11	.47	-
11L	-	.40

NS = native speakers.
NNS = non-native speakers.

overall length. The extreme brevity of some composi-
tions creates a high type-token ratio, since there is
less probability that certain lexical items will be re-
peated and a high incidence of the necessary closed class
items. A true measure of this ratio would only be more
apparent if compositions of similar length were compared.
Thus, the writing of the NNS11L group, whose compositions
were the longest overall, had the lowest type-token ratio.
NS8, NS9 and NS10 groups had slightly higher type-token
ratios than the other groups. Otherwise, the ratio was
identical, both for the remaining NS groups and NNS9L.
It is worth noting, however, that these figures were based
on computer counts in which every piece of language with
a space before it and after it is counted as a separate
word. It is possible that more variant spellings and
other anomalies occurred in the NNS data, which, if
omitted from the count, might have slightly reduced the
total number of different words.

Lexical Choice

The results of the analyses of lexical choices for
five topics: the cowboy, the robbers, Santa's toys, the
act of robbing, and "knocking out" are presented in
Tables 15 to 19.

Table 15

Terms Used to Refer to <u>Cowboy</u>

Term	Number of Occurrences			% of Total Use		
	NS	NNS9L	NNS11L	NS	NNS9L	NNS11L
cowboy	75	29	23	44	62	52
hero	34	6	6	20	13	14
man	23	8	10	13	17	23
good guy	15	2	–	9	4	–
guy	9	–	1	5	–	2
fellow	3	–	–	2	–	–
gunslinger	2	–	–	1	–	–
boy	1	1	1	0.5	2	2
others	8[a]	1[b]	3[c]	5	2	7
TOTAL	170	47	44	99.5	99	100

[a]person, ranger, Mr. Good, youngster, ranger, horse-rider, stranger.

[b]one.

[c]singer, Mexican, stranger.

<u>Note</u>. Percent may not total 100 due to rounding.

NS = native speakers.

NNS = non-native speakers.

Table 16

Terms Used to Refer to Robbers

Term	Number Of Occurrences			% of Total Use		
	NS	NNS9L	NNS11L	NS	NNS9L	NNS11L
robbers	70	3	7	31	5	19
men	50	14	9	22	25	24
bandits	21	-	6	9	-	16
bad guys	19	-	4	8	-	11
gangsters	12	25	4	5	45	11
villains	10	-	-	4	-	-
guys	8	3	1	4	5	3
thieves	6	4	1	3	7	3
outlaws	5	-	-	2	-	-
crooks	4	-	-	2	-	-
cowboys	3	-	1	1	-	3
criminals	2	-	-	1	-	-
characters	2	-	-	1	-	-
boys	-	2	2	-	4	5
person	-	1	1	-	2	3
gang	1	1	1	0.4	2	3
others	9[a]	2[b]	-	4	4	-
TOTAL	222	55	37	97.4	99	10.1

[a] gun men, jerks, banditoes, pilgrims, hoodlums, doods, binders, meanies, hijackers.

[b] stealers, bads ones.

Note. Percent may not total 100 due to rounding.

NS = native speakers.

NNS = non-native speakers.

Table 17

Terms Used to Refer to Toys

Term	Number of Occurrences			% of Total Use		
	NS	NNS9L	NNS11L	NS	NNS9L	NNS11L
toys	85	17	9	50	46	24
bag (of toys)	43	13	14	25	35	38
sack (of toys)	34	—	—	20	—	—
load (of toys)	2	—	—	1	—	—
presents	6	2	3	3	5	8
gifts	—	1	5	—	3	13
packet/pocket	—	2	2	—	5	5
pouch/poach	—	—	2	—	—	5
other	1[a]	2[b]	2[c]	0.5	5	5
TOTAL	171	37	37	99.5	99	98

[a] goodies.

[b] package, monai.

[c] surprises, treasure.

Note. Percent may not total 100 due to rounding.

NS = native speakers.

NNS = non-native speakers.

Table 18

Terms Used to Refer to <u>Robbing</u>

Terms	Number of Occurrences			% of Total Use		
	NS	NNS9L	NNS11L	NS	NNS9L	NNS11L
rob	43	2	4	26	5	14
take	37	15	7	22	39	24
hold up	33	1	1	20	3	3
steal	31	4	6	18	10	21
Santa gives	7	4	7	4	10	24
force to/make hand over	3	–	–	2	–	–
run off with	2	–	–	1	–	–
Santa throws	2	–	–	1	–	–
pick	–	6	2	–	16	7
keep	–	2	1	–	5	3
get	–	2	–	–	5	–
other	9[a]	2[b]	1[c]	5	5	3
TOTAL	167	38	29	99	98	99

[a] Theft of Santa's bag, rip off, stood up, had him, sold, snatch, strip, hijack, Santa gave up.

[b] stone (=stolen?), kidnap.

[c] cambril.

NS = native speakers.

NNS = non-native speakers.

<u>Note.</u> Percent may not total to 100 due to rounding.

Table 19

Terms Used to Refer to <u>Knocking Out</u>

Terms	Number of Occurrences			% of Total Use		
	NS	NNS9L	NNS11L	NS	NNS9L	NNS11L
hit	88	5	11	62	18	41
knock (out)	41	8	4	29	28	15
punch	–	2	4	–	–	15
touch	–	2	1	–	7	4
assomme	–	3	–	–	11	–
clobber	2	–	–	1	–	–
whack	2	–	–	1	–	–
frappe	–	2	–	–	7	–
bang on head	2	–	–	1	–	–
stop	–	3	–	–	11	–
hurt	–	2	1	–	7	4
other	6[a]	3[b]	6[c]	4	11	22
TOTAL	141	28	27	98	100	101

[a]Brought guitar down, down, club, catch, klunk, konk.

[b]put, fell, fite.

[c]bite, jump, catch, beat; receive on head, push.

<u>Note</u>. Percent may not total 100 due to rounding.

NS = native speakers.

NNS = non-native speakers.

As shown in Table 15, _cowboy_ was the term most used by both NS and NNS, while _hero_ was used slightly more often by NS. _Good guy_ and _guy_ were also used more frequently by NS.

To refer to the robbers (see Table 16), the most frequent term was _robbers_ for NS and _gangsters_ for NNS. _Men_ (with or without an adjective) was the next most frequent term for both. _Gangsters_ was also used by NS, although much less frequently. Interestingly, _bandits_, which is an appropriate cognate, occurred slightly more often in NS writing than NNS. _Thieves_, however, appeared slightly more frequently in NNS writing. The lexical items, _villains_, _crooks_ and _outlaws_ did not appear at all in the NNS compositions although _bad guys_ did.

In referring to Santa's cargo (see Table 17), it was not only the lexical item to refer to his toys or gifts that was of interest, but how students would refer to the container of the toys. In most cases, both NS and NNS referred only to the toys without mentioning what they were in. When they did, however, NS used the terms _bag_ and _sack_ almost equally often. NNS used _bag_ but never _sack_. They also used the (wrong) lexical item _pocket_ and the marginally correct _pouch_.

The NS most frequently used some form of rob (including incorrect use of rob to mean steal) as shown in Table 18. The NNS used take most frequently and rob quite infrequently. Steal occurred fairly often in the compositions of both NS and NNS. The biggest difference was in the much more frequent use of hold up by NS and the use of Santa Claus gives by NNS. Pick, a frequent (incorrect) choice of the NNS, was never used by the NS.

Finally, when referring to the knocking out of the robbers (see Table 19), both groups used hit most often. Knock (out) appeared next most frequently for both groups (with NNS often leaving off the particle out). A variety of other terms, including French words, were used by the NNS (such as punch, frappe, assomme) while NS rarely used other terms.

There were some differences in the relative fre- quency of the lexical choices between the older and younger NNS groups. In certain cases (such as the use of robbers, and bandits; rob and steal) the older students used the correct lexical items more frequently. There was more use of inappropriate and general terms in the writing of the grade 9 NNS. For example, these students used take more

often, and almost all the uses of gangster were by Grade 9
students. They also used certain French or "anglicized"
French words - pick, assomme, frappe, hurt (heurter) -
more often.

CHAPTER IV

DISCUSSION

In this chapter the results for all the NS and NNS
groups on the measures of length and error presented in
Chapter III will be discussed. As well, some of the
problems and limitations of T-unit analysis as used in
this study will be described. Differences in content,
relating to the choice of certain lexical items will also
be briefly discussed.

Overall Length

As has been reported, the NNS11 group wrote compo-
sitions that were, on the average, much longer than those
written by any other (NNS or NS) group. It is not sur-
prising that they should have written much more than the
NNS9 students. First, they had had two more years of
exposure to and practice in English in the classroom.
Second, because English is not a compulsory subject in
Grade 11, they were, to some extent, a self-selected
group of "good" language learners. But it is surprising

that the overall mean length of their compositions also
exceeded that of any NS group, including NS11. The
conditions under which all groups wrote were very similar.
However, the instructions given to NS9 and NS11 were
slightly different from those given to all other groups
(NS and NNS) and may have caused them to view the composi-
tion task as a summary rather than a step-by-step retel-
ling of the story. This would naturally lead them to
write less. As well, some of these students may have
viewed the task as too easy for their grade level and
therefore written only the essentials without elabo-
rating. With their superior command of the lexicon and
syntax, NS may have been able to pack as much information
into less space. On the other hand, the NNS11 students,
without all the linguistic resources of the NS at their
command, may have used a lot of circumlocutions when
they lacked precise terms. There are some examples of
circumlocutions from the NNS11 data:

Examples:

The cowboy shows with his fingers (points to) the
saloon. You have three robbers in the mountain who
sees Santa Clause with a king of glaces that it
permitted us to see at a long distance. (binoculars)

Nevertheless the overall impression one has from reading

the NNS11 compositions is that they are longer simply

because the writers give more details of the story than

any other group. Only a more complete analysis of content

would determine whether or not the NS groups were more

successful at condensing the same information into longer

T-units than the NNS11 students, or whether the NNS11

students simply added more detail.

It seems curious as well that the NS6F students

wrote compositions whose mean length exceeded that of

their NS6E counterparts and that of NS in higher grades.

There are numerous possible explanations for this, such

as perception of the task, overall verbal proficiency

and emphasis on writing in the school program.

As was mentioned in Chapter I, some studies

(Arthur, 1979; Richardson et al., 1976) found that there

seemed to be a relationship between teacher ratings of

students' proficiency and overall composition length –

that is, those who wrote longer compositions also

received higher grades or were judged more proficient in

other areas of scholastic aptitude. In this study, it

appears that overall length serves as some kind of

discriminator between the NNS9 and NNS11 groups. However, its usefulness may well be considered doubtful since length alone does not appear to distinguish between grade levels of NS in this study. Nor are the NS groups thus differentiated from the NNS groups.

T-Unit Analysis

The use of the T-unit as a means of measuring syntactic growth in NS writing is well documented. A comparison of the mean T-unit length of the NS groups in this study with the means of the groups in Loban's (1976) study is shown in Table 20.

Both NS6E and NS6F fit into the range represented by Loban's subjects when they were in Grade 6; NS6F are closer to the mean of Loban's "high" group while the mean for NS6E is between Loban's "random" and "low" groups. The NS8 and NS10 groups both have means lower than the "low" groups at the equivalent grade levels in Loban's study, while the mean for NS9 and NS11 is slightly above that for Loban's "high" group in the corresponding grades. If Loban's results can be considered "norms", it would appear that NS10, and NS8 in particular, are writing as a group at a

Table 20

Mean T-Unit Length: NS Groups Compared
to Loban's Groups*

		Mean T-Unit Length[a]		
		Loban[b]		
Grade		High	Random	Low
6E	8.4	10.23	9.04	6.91
6F	9.9	-	-	-
8	8.9	11.24	10.37	9.49
9	11.4	11.09	10.05	8.78
10	11.0	12.59	11.79	11.03
11	12.0	11.82	10.69	11.21

*Loban's study is a longitudinal one, so the results for
the different grade levels are for the same students in
grade 6, 8, etc. (n = 35). In the present study, each
grade level is represented by a different group.

[a]Group score method.

[b]Adapted from Loban, 1976, p. 33.

level of proficiency below their grade level while NS9 and
NS11 students are slightly more advanced writers than most
in their grade levels.

If the mean T-unit length of the NNS groups is compared with Loban's findings, both NNS9 and NNS11 appear to be writing at a level within the range for Grade 6 NS in his study. On this measure they are also comparable to the NS6E and NS8 students of the present study.

As was reported in Chapter I, a number of studies have tried to relate the mean T-unit length of ESL writers to overall proficiency in the second language. The results of this study show a significant difference in mean T-unit length between the Grade 9 and Grade 11 NNS groups. In other words, what is intuitively suspected - that the writing of the older students is superior to that of the younger students - is empirically confirmed for this measure.

Problems in Counting T-Units

In other studies, words or phrases that do not constitute T-units are counted as mazes or garbles (Vann, 1979). It was sometimes difficult in examining the NNS writing in this study to decide what to count as a maze and what as a deviant T-unit. The following examples illustrate the problem:

Examples

NS6E

1. The cowboy asks if could play.

2. Well hes tring ta get his hours to go the bad
   come out.

3. When he finally did get in he asked the robbers
   if he play with them.

Since it appeared likely that a moment of inattention had
caused a word to be left out, T-units where a correction
could be made by the addition of a word were counted
(See discussion of the word missing cateogry in Chapter II).

Another problem arose in the division of T-units.
In some cases, division of the T-unit after the main
clause created a T-unit that was incomplete.

Example

NNS11

At this time Santa Closs and the sherif arrive, go
in saloon, and the battle begin.

If we attempt to divide this into T-units, the logical
place to do so is after saloon since "the battle begin" is
an independent clause. In this case the first T-unit would
be missing a word (and before go) and should therefore be

considered as containing an error. One begins to wonder
if such a division is justifiable. In such cases, the
whole sentence, including the second main clause, was
counted as one T-unit.

Error-Free T-Units

To maintain strict comparability between the NS and
NNS writing, the same standards were applied to the compo-
sitions of both groups in determining and counting error-
free T-units (EFTUs). Thus any T-units containing errors
(or "anomalies") except spelling etc., were not counted in
the calculation of the number and mean length of EFTUs.

As Table 21 indicates, there is little difference in
mean T-unit length in NS writing whether or not T-units
were counted as error-free. For NNS writing however, the
difference between T-unit and EFTU mean length is somewhat
greater. If only T-unit length is considered, as was
discussed above, the NNS groups are similar to some NS
groups. But when EFTU length is compared, even the most
advanced NNS are writing shorter units than the least
advanced NS students. Thus the error-free distinction
appears to discriminate NS from NNS better than regular
T-units at least for the groups in this study.

Table 21

Comparison of Mean T-Unit Length and Mean
Error-Free T-Unit Length: All Groups

Class	Mean T-Unit Length		Mean EFTU Length	
	Group	Individual	Group	Individual
		NS		
6E	8.4	8.5	8.3	8.3
6F	9.9	9.9	9.8	9.8
8	8.9	9.3	8.6	9.0
9	11.4	11.7	10.6	11.4
10	11.0	11.3	10.7	10.9
11	12.0	12.0	11.6	11.9
		NNS		
9	7.9	7.8	6.6	5.0
9L	8.1	8.1	6.8	6.0
11	9.1	9.4	7.9	6.2
11L	9.6	9.7	7.9	7.5

Note. Group and Individual refer to two different scoring methods.

NS = native speakers.

NNS = non-native speakers.

EFTU = Error-free T-unit.

Although NNS11 students may write longer T-units, as compared to some NS6 and NS8 students, they are unable to consistently produce syntactically more complex (or at least longer) T-units without error. NNS9 students appear not to have reached the stage of syntactic development of most NS6 students, whether or not errors are taken into account. Of course, this study was concerned with their syntactic development in their second language. One might hypothesize that their T-unit length was low in their first language as well. This does not appear to be the case however. An analysis of compositions written in French by the NNS9L subjects on the same topic revealed an average T-unit length of 10.5 words.[1] T-unit norms may be different for French and English, of course. Unfortunately, there are no large scale studies of French-speaking adolescents' writing in terms of T-units. The only study using T-unit measures of French writing is that of Monroe (1975). His subjects were English-speaking college learners of French. Monroe reported that the mean length of the T-units written by the most advanced NNS subjects in his study (graduate students of French) was 10.98.

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[1]This analysis was done by Bob Wallace. The students were in Grade 10 at the time the data were collected.

One problem in using an analysis of EFTUs in NNS writing is that, particularly when the level of proficiency is low, as it was for the NNS in this study, the total number of EFTUs is virtually useless for discriminating among individuals. Some students produced no or very few EFTUs, although they wrote quite long compositions. Thus, as the group average is based on only about one-third of everything written, as was the case here, its validity may be questioned.

Comparisons of group means between NNS9 and NNS11 revealed significant differences on both mean length of EFTUs and percent of EFTUs. These measures, as well as mean T-unit length, appeared to discriminate well between the writing of the two grade levels.

It was much easier to apply T-unit measures than to determine and count EFTUs. Yet an analysis based only on T-units cannot take into account the high frequency of error which is an important feature of the production of the ESL learner. An analysis based only on EFTUs is restricted, since it is limited to such a small proportion of the language produced. Neither measure alone can give a complete picture of overall proficiency in second language writing.

The results on these three measures confirm that a group of ESL learners, who appear to be superior to another group in many respects, including results on tests[2] and volubility (composition length), write significantly longer T-units, whether or not errors are taken into account. They also write more error-free T-units than the other group. As these results serve to confirm our intuitive assessment of their writing as superior, one may wonder if the time and effort involved in an exhaustive T-unit analysis is worth the trouble.

These results do not give evidence for developmental growth in writing, since the study was cross-sectional. As has already been noted, the Grade 11 NNS are in some sense a selected group and may be a group of good language learners. One cannot conclude, therefore, that the performance of the "middle of the road" Grade 9 NNS would equal theirs, even if they continued to study English in Grade 11.

Although the group results may tend to support the impression that the NNS11L students as a group are more

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[2] Results on the structure section of the CELT (Comprehensive English Language Test), showed that NNS11L students scored significantly above chance with a mean scores of 37.6, while NNS9L students scored significantly below chance, with a mean score of 17.09. These groups were largely composed of the same subjects as the NNS9L and 11L groups of the present study, although the numbers may have varied slightly.

proficient second language writers, it would be a mistake
to assume that compositions by individual students could
be compared and evaluated using the quantitative measures
used in this study. One of the dangers of employing
T-unit and EFTU measures to characterize proficiency is
that this may well lead teachers to attempt to apply
them to their students' writing with a view to evaluating
their overall second language ability. This seems to be
a logical direction for the development of an "index of
development" (see Larsen-Freeman, 1979). However, neither
the results of this study nor those of any other reported
investigation in which these measures are used can give
support to such a practice. There is a good deal of
variation in the performance of individuals on all of
these measures in this study, and there would likely be
even more variation on different writing samples written
on various topics and under different conditions by the
same student.

NS Comparison Data

Data from NS of the same age and background as the
NNS subjects were found to be of great use, both in pro-
viding a point of reference to which to compare findings
and in yielding first hand evidence to support or refute

the "native speaker intuition" of the researcher. There
were a number of cases where it was difficult to decide
whether or not a particular usage could be considered
correct.

In the NNS compositions there were frequent occur-
rences of the definite article "the" before a noun, where
it seemed no article was required:

Examples:

> NNS9
>
> The Santa Claus and the sheriff
> arrive in the saloon.
> It's the Christmas time.

Although we can be fairly sure that the second example is
unacceptable, it is conceivable that, in some circumstances,
the Santa Claus may be correct. It seemed obvious that
this particular use of the, which was very frequent in
the NNS data (97 instances out of a total of approximately
260 occurrences of Santa Claus) was prompted by the
students' native language – the definite article le is
required before Père Noël. However, to be certain that
this was indeed a non-native use, the NS compositions were
surveyed to determine what word, if any, preceded Santa
Claus in their writing. Out of nearly 500 instances where

Santa or Santa Claus was used, only twice was it preceded
by the - once when it was put in inverted commas (the "Santa
Claus") and once when the writer had previously stated:
"a man who is supposedly Santa Claus". This seemed to
justify counting this particular use of the article as an
error in the NNS writing.

Another example was the use of after as an adverbial
rather than as a subordinate conjunction. There were 46
instances in the NNS compositions while there were only
two similar instances in the NS writing, both in the compo-
sitions of a NS6F subject (that is, one whose school
language was French):

Examples:

> After they barged into the saloon and scarded
> everybody in there too.
> After the sheriff took them to jail.

Since they were virtually absent from NS writing, instances
of after used as an adverbial in the NNS writing were treated
as errors in this study.

Another questionable area was the use of in rather
than into after certain verbs:

Examples:

> NNS9
>
> The tree thiefs come in the city riding on
> their horses.

The white man comes <u>in</u> town signing and playing the guitar.

The sheriff and Santa Claus went <u>in</u> the saloon.

In the NS compositions, similar examples were found:

Examples:

NS6

The cowboy comes <u>in</u> the saloon.

Then Santa Claus and his friend went <u>in</u> the saloon.

Such uses of <u>in</u> occurred fairly frequently (about 25 times) in the NS compositions. Thus, this use of <u>in</u> where the researcher's native speaker intuition required <u>into</u> was considered correct.

Errors

There was a wide gap in the number of errors between the NS and NNS. As noted in Chapter I, Gaies (1980) has stated that one of the drawbacks to T-unit analysis is that it does not reveal the greater frequency and different variety of errors in second language data. Certainly in this study, T-unit results alone do not reveal all the differences between NS and NNS, or between NNS at different grade levels. One cannot be too surprised at the much greater frequency of errors in the NNS compositions. What

was surprising in these results, however, was the similarity

both in the types of error and relative frequency of the

error types of the two NNS groups. Although the NNS11L

students wrote much longer compositions, and slightly

longer T-units and EFTUs than the NNS9L students, they

continued to make the same kinds of errors almost as

frequently as did the younger students. The differences

between the two groups did not appear to be revealed in

the area of grammatical correctness. Of course, the

errors investigated in this study were limited primarily

to the morphological and lexical. An analysis of a dif-

ferent sort, involving clauses and text features, might

have revealed other differences.

Since the NNS11L students wrote so much more, it

must be noted that they also used correct forms more

frequently even though the percentage of error was not

much different. While they had more occasion to make

errors, they had created more opportunities to be correct

as well. As reported in an earlier study (Lightbown &

Malcolm, 1980), NNS11L students were nearly 10% more

accurate (81%) in their use of the plural in writing than

the NNS9L students (72%). Therefore, although it appeared

on the surface that the Grade 11 students were less correct,

because the frequency of errors in their compositions was

greater, if the frequency of occurrence of the structures is taken into account, it may be seen that there were more correct uses as well as more errors.

The fact that the same types of errors appeared in virtually the same ranks for both groups led to some questioning of expectations of proficiency as gauged by grammatical correctness. The classroom emphasis was on the practice and drilling of precisely those grammatical structures that appeared at the top of the error ranks for both groups. For example, the plural was one of the first structures introduced when the students began their ESL instruction in Grade 5. It is discouraging to see that this error occurred with frequency in the writing of even the most advanced learners. Although the rule for the plural is an easy one to demonstrate and presumably to learn, since the Grade 11 students were still making errors in the plural about 20% of the time, it appeared they had not yet "mastered" it.[3]

After 6 years of practice, drilling and correction it is difficult to believe the students did not know the

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[3]Further evidence of this apparent lack of progress was found in other studies which came out of the Barkman and Lightbown research project. See Lightbown and Malcolm (1980) for a discussion of performance on certain grammatical morphemes, and Moro (1981) for a discussion of accuracy in the use of prepositions.

rule. As Krashen (1977) has proposed in his "monitor model", there is a distinction between knowing a rule and applying it. While the second language learner may be perfectly capable of producing the structure correctly when his attention is focused on form, when the focus is on the message - on communicating his needs or ideas - there may not be an opportunity for the conscious, "learned" knowledge to come into play.

In this study, students were working under time constraints to write down as much of the story as they could. It is therefore unlikely that they had much opportunity to apply the "monitor" - their learned knowledge of grammatical rules.

An initial impression that the results indicate no progress in terms of grammatical correctness may be misleading. First, an impression of correctness based only on what is wrong and not what is right is naturally a distorted one. Second, inability to achieve perfection in the use of grammatical structures may not mean that the second language learner does not know the rule, only that he has not applied it.

NS Errors

The analysis of NS compositions revealed that, although overall "errors" occurred much less frequently than they did in NNS writing, there was some similarity in the error types. There were a number of instances of uninflected plurals and uninflected verbs. Most of the errors in the NS compositions, however, were errors of omission rather than commission. The missing word category (a verb or noun usually) was ranked first. A number of preposition and article errors were also omissions.

The overall low frequency of these errors suggests that they are "mistakes" or "performance errors", rather than evidence of incomplete knowledge of certain grammatical features of their native language. The fact that so many of these errors are omitted words lends further support to the belief that they are "slips of the pen". It seems likely that, given the time to revise and check over their work, the NS writers would have corrected many of these slips. It seems only fair to assume that the NNS writers would, in many instances, have been able to do the same. That is, at least some of the errors in the NNS students' writing could also have been "slips of the pen" and not proof of incomplete knowledge of grammatical rules. Only

another investigation would determine if the older NNS students would be more successful than the younger ones in correcting their errors.

Comparison of the Writing of Individual NS and NNS

In all the measures reported – those concerned with T-units and with errors - the gap between NS and NNS was wide. Still, there was some overlap in mean T-unit length and type of errors. It seemed that there might be some compositions written by individuals that were similar enough to allow a one-to-one comparison. That is, if compositions were matched on measures of T-unit length and the overall rate of error, the question was, would it still be possible to distinguish NS from NNS compositions on some qualitative differences.

All the individual compositions were reviewed to see if there were any which would be comparable on three measures: number of T-units, number of EFTUs, and mean length of EFTUs. Of all the NS compositions, only one, written by a Grade 6 student, was near enough to NNS performance on these measures to allow for comparison with NNS compositions. The choice was so limited because there were few NNS compositions which were similar to NS ones

in EFTUs. As well, NNS11L students, some of whose compositions contained a high percentage of EFTUs, wrote more T-units than virtually anyone else, thus making it impossible to match their compositions with those of NS.

The NS6E composition and two NNS9L compositions were shown to twenty-one undergraduate students enrolled in a TESL course at Concordia University. Scores for the three compositions on the three measures of length and error are presented in Table 22.

Table 22

Scores for Three Compositions on Three
Measures of Length and Error

Composition	Number of T-Units	Number of EFTUs	Mean Length of EFTUs
01 (NS6E)	20	12	7.9
02 (NNS9L)	19	13	7.2
03 (NNS9L)	24	14	8.4

These students were asked to indicate which compositions they judged to be written by a native speaker and which by a French-speaking ESL learner. They were told that the NS subject was in Grade 6 and the NNS were in Grade 9. All

of the students in the class were either practicing or
future teachers of ESL. Some of them were not themselves
native speakers of English. The judgements of the two
groups of TESL students — NS and NNS - were tabulated
separately. The results of their judgements are given in
Table 23.

Table 23

Judgement of Compositions Written
by Individual NS and NNS Students

Judges.	Comp01(NS6E)		Comp02(NNS9L)		Comp03(NNS9L)		Total	
	CJ	IJ	CJ	IJ	CJ	IJ	CJ	IJ
NS	6	6	10	2	4	8	20	16
NNS	4	5	3	6	1	8	8	19
Total	10	11	13	8	5	16	28	35

CJ = correct judgement.

IJ = incorrect judgement.

The guesses overall were more often incorrect than
correct. But the NS were more accurate at guessing correct-
ly (55%) than the NNS (30%). The undergraduate students were
also asked to give their reasons for suspecting a composition

was written by a NNS. Those who correctly guessed the
NNS composition most frequently drew attention to errors
in prepositions, uninflected verbs, spelling, articles,
sequence of tenses, lexical, inappropriate -s, and genitive
(in that order). However, those who guessed (incorrectly)
that the NS6E composition was written by a NNS cited these
errors: spelling, punctuation, lexical (this particular
student used "robbery" to mean "robber") and over-regu-
larized past tense errors.

Interesting though these results were, it would be
foolhardy to attempt to draw any conclusions from them
about the nature of the differences in quality between NS
and NNS writing. An investigation involving only three
compositions does not yield results in which much confidence
can be placed. However, it may suggest an area for further
research. Since the judges here were all involved in ESL
teaching, they may have had a tendency to be more sensitive
to grammatical and morphological errors than the "man in the
street". It would be interesting to continue this study
with judges of different backgrounds. For the purposes of
the present study, however, this investigation only served
to underline the difficulty in finding comparable data from
the NNS and the NS subjects.

Analysis of Content

Since it appeared that the NS and NNS groups were so
far apart on measures of length and error as to allow
little opportunity for direct comparison, it was felt that
an investigation of content might yield different informa-
tion about the ability of the ESL learners to get the meaning
across, that is, to investigate the "lexical richness"[4] of
their writing.

As was mentioned in the previous chapter, measuring
vocabulary diversity through type-token ratio did not seem
to reveal much of interest; since variability in overall
length affected the results so greatly.

Some results of the lexical choice analysis were sur-
prising. First, the NNS overall seldom resorted to using a
French word or an "anglicized" French word.

Although the NNS sometimes used terms that appear to
be transferred from French, such as pick (piquer) for rob
and poach/pouch (poche) for bag (of toys), they also failed

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[4]According to D. Mendelsohn (1981, p. 1) "lexical richness
is an index of how large a vocabulary the learner is
shown to be using, and how nonrepetitious it is".

to use some quite acceptable cognates. While NS used sack (of toys) nearly as frequently as they did bag (of toys), the French-speaking NNS never used sack or sac.

In general, the NNS tended to use general or super-ordinate terms - such as man - to a greater extent than the NS. They also may have avoided unknown lexical items - by using, for example, Santa Claus gives them the bag instead of the robbers steal the bag.

There were some differences in the appearance and frequency of some lexical choices in the compositions of the NNS9L and NNS11L students. There was more evidence of the use of French terms in the writing of the younger group. For example, in referring to knocking out, the NNS9L students used assomme, frappe and hurt (heurter ?) more often than the older students. Pick (piquer) appeared more frequently in NNS9L compositions. Certain "French" terms (i.e., those borrowed from English) also appeared with greater frequency in their writing. All uses of gangster to refer to the robbers occurred in the NNS9L compositions, and knock out (in this case an appropriate choice) also appeared more often in these compositions.

While the NNS9L students never used the appropriate cognate bandits, the NNS11L students did, and they used other appropriate terms, such as robbers and bad guys more often as well.

This examination of lexical choices, although limited in scope, reveals another area in which the NNS writing differs from that of their NS peers. Without the wide range of vocabulary choice of a NS available to them, the NNS had to rely on their limited lexical resources to convey meaning, which often led them to use terms that were imprecise or inappropriate. As well, although they did appear to sometimes attempt to transfer items from their mother tongue, in other cases they failed to take advantage of available cognates. Nevertheless, there appears to be some evidence that the older students used a wider and more appropriate range of lexical choices than the NNS9L students. It is not certain, however, because of the intrinsic difference between the two groups previously discussed, that the writing of the younger students would show the same characteristics in the area of lexical choice after two further years of instruction.

CHAPTER V

CONCLUSION

This study was undertaken to describe and compare aspects of the writing of native and non-native speakers of English. Compositions written in English by English-speaking elementary and high school students and by French-speaking high school learners of ESL were analyzed for length, as well as errors and lexical choices. This investigation was guided by several research questions:

1. The applicability of objective measures of length - particularly T-unit and error-free T-unit measures - to the writing of low proficiency ESL learners.

2. The usefulness of such measures as indicators of syntactic development and proficiency in the second language.

3. Similarities and differences in syntactic complexity in some compositions written by first and second language learners and the extent to which the writing of certain groups of non-native speakers is comparable to that of certain groups of native speakers.

4. Differences in "quality" – as measured in the frequency and types of errors, as well as lexical choices – between NS and NNS writing.

The data were compositions written under the same conditions by over 300 students, both NS and NNS, at different grade levels, from Grade 6 to Grade 11, on the same topic - the description of the action in a short, animated film (The Great Toy Robbery). These compositions were first analyzed using measures of length and syntactic complexity - overall length, number and mean length of T-units and error-free T-units. All compositions written by native speakers and compositions written by a sub-group of 66 French-speaking ESL learners were examined for errors. As well, for this sub-group and all NS groups, the use of certain lexical items was investigated.

The results of the measures of length and syntactic complexity revealed that, while the longest compositions were written by the Grade 11 NNS, the writing of the NS groups generally surpassed that of the French-speaking learners of ESL in mean T-unit length. Especially when error-free T-units (EFTUs) were taken into account, the gap between the writing of the English NS and ESL learners was very wide.

It appeared that, although in overall length the writing of the older (Grade 11) NNS was superior to that of the younger (Grade 9) NNS, length alone was not a very useful indicator of greater writing proficiency. On this measure, the length of the compositions of one of the youngest NS groups (Grade 6) exceeded that of the oldest (Grade 11).

Nevertheless, although all subjects wrote within the same time constraints, different instructions may have resulted in a different perception of the writing task for some groups of NS, causing variation in overall length.

The oldest NS group wrote the longest T-units. All NS-groups, with the exception of Grades 8 and 10, appeared to be writing at a comparable level of syntactic complexity (T-unit length) to native-speaking English students in other reported studies. On this measure, the NNS groups, particularly the Grade 11 students, appeared to be at a similar level of syntactic complexity to that of the youngest (Grade 6) NS. When EFTUs were measured, however, there was no overlap between NS and NNS groups either in number or mean length of EFTUs. That is, even the youngest NS surpassed the most advanced NNS in EFTUs.

Other studies of ESL writing have attempted to show that measures of T-unit length and measures taking errors into account may be of value in discriminating levels of proficiency in ESL. The results of this study revealed that there were significant differences between the NNS9 and NNS11 groups on three measures — mean T-unit length, mean error-free T-unit length, and percent of error-free T-units. These results were not overly surprising, as there was every reason to believe that the older students should be superior since they had chosen to take English and had scored higher on a standardized test as well as having had two more years of instruction in English.

To further investigate the usefulness of such measures with young writers, more research would have to be done. As well as using other measures of proficiency – such as holistic ratings and teacher-assigned grades – to separate the groups, it would be essential to have a number of writing samples for each individual, to control for variation of topic and style. Administering a rewrite passage – such as the "Aluminum Paragraph" – might also give a clearer picture of syntactic development, as well as further restricting variation of subject matter and controlling overall length.

As was discussed in the preceding chapter, an investigation using T-unit measures requires that certain decisions be made about ways to segment writing and what to count. Although there were some difficulties in deciding what to count as a T-unit with errors and what as a maze, the biggest problem arose in determining what was or was not an error-free T-unit. First, some decision about the criteria for judging a T-unit error-free had to be reached. In this case, spelling, punctuation and other writing mechanics errors were overlooked. Loosening the criteria created a number of problems, since the line between a spelling error and a more serious one was often very fine. Counting only T-units perfect in all respects would limit the possibility of potential inconsistencies. However, particularly in these data, insistence on perfect T-units would have limited the analysis to a very small proportion of the total writing of any individual or group. Certainly errors of the mechanical type did not seem to weigh very heavily in the work of investigators of NS writing, since there is no reference to anything equivalent to perfect T-units in that research, and as this study has shown, native speaker writing may contain grammatical and morphological "errors" as well as mechanical ones.

In general it was possible to establish T-unit boundaries in the writing of these low proficiency writers. Deciding on error-free status was more difficult, however, and often somewhat arbitrary decisions had to be made. To guard against inconsistencies in future research it would be useful to check the reliability of these judgements with one or more other investigators.

The question of the suitability of these measures is one that cannot readily be answered. The T-unit has been shown to be an efficient and reliable instrument for measuring syntactic differences in the writing of native speakers of English. But the value of this measure, and particularly the error-free T-unit measure, to assess overall proficiency in a second language remains to be proven. As the wide range in scores within groups shows, these measures cannot (nor were they designed to) discriminate effectively among individual writers. They do appear to show group differences, but as they generally only confirm intuitive, global assessments of ability, one may question whether the cost in terms of time, energy and the possibility of error justifies the application of such procedures.

There were too few NS and NNS subjects that were comparable on measures of length and of EFTUs to warrant examination of differences between groups as an indication of syntactic development. Even the most proficient NNS made many more errors than NS who wrote compositions of a comparable length. Therefore, for the NS and NNS groups of subjects in this study, no further investigation was made of syntactic features at various stages of syntactic complexity. A comparison of the writing of somewhat more mature ESL learners with that of NS might make possible a closer examination of emerging syntactic features.

An examination of the type and frequency of errors in the writing of the older NNS group appeared at first glance to show little improvement in grammatical correctness. The total number of errors per composition in the Grade 11 group was higher than for the Grade 9 NNS although the overall ratio of error to total number of words written by the Grade 11 NNS was slightly lower. The most striking result, however, was the similarity in the type of errors made. Grade 11 NNS did not appear to be any better at inflecting verbs and nouns correctly than the younger Grade 9 NNS. But, since their output was

double that of the younger students, it was obvious that
they were creating more contexts for correct use as well.
A different kind of analysis, in which all uses of struc-
tures, correct and incorrect, were examined might have
shown greater accuracy overall in the writing of the Grade
11 NNS.. Furthermore, since the same types of "errors"
appeared in the NS writing (albeit in much smaller numbers)
there was reason to believe that in many cases they were
"performance" errors, and would have been corrected had
the writer had the time to reread and revise his work.
Only further investigation would reveal if the older
students would have performed better at correcting their
errors.

One useful outcome of the investigation of errors,
besides the finding that "slips of the pen" that are
identical to what is usually condemned as an error in NNS
writing also occurred in NS writing, was the opportunity
to verify "correctness" in the use of English by direct
comparison to the usage of native speakers of a similar
age and background. Since most research in this area
is conducted by individuals who are trained in language
teaching and probably users of a hyper-correct version of
English, their "intuition" may lead them to judge as

unacceptable certain uses that are widespread among the
native-speaking peers of the subjects under investiga-
tion.

The brief examination of lexical choice showed that
the NNS of this study used more general terms than did
NS, reflecting their restricted vocabulary. As well, they
sometimes chose items from the wrong semantic field. There
was evidence of the use of false cognates. But the NNS
also sometimes failed to use available cognates. In
general, their vocabulary was much less diverse, less
specific and less rich than that of the NS. The whole
area of lexical development is a fruitful one for further
research and one that has been underinvestigated. A more
detailed study of lexical choice - and lexical richness -
would reveal more about the resources and strategies of
second language learners in conveying meaning and bring a
greater insight into an often neglected, but extremely
important area of language proficiency. As Mendelsohn
(1981, p. 15), who makes a plea for the inclusion of
more direct teaching of vocabulary in ESL programmes, has
pointed out: "there can be no language proficiency
without a knowledge of words".

This study was undertaken to examine writing proficiency in ESL by comparing the compositions of ESL learners to what might be considered native speaker "norms". The results showed that in one area of language skill - syntactic complexity - the performance of even the most advanced ESL learners of this study is well below that of their native speaker peers, and even of that of many much younger native speakers. There is no reason to expect that they should perform similarly, of course. Given the amount and kind of instruction the NNS have had, as compared to the years of instruction and reinforcement the NS have had, not only in school but in their daily lives, it would be foolish to expect otherwise.

The Grade 11 NNS wrote significantly longer T-units, and more and longer error-free T-units than the Grade 9 NNS, but when the type and relative frequency of grammatical errors were considered, there appeared to be little difference between the two NS groups. The second language learners also had much more limited lexical resources at their disposal than did the NS and continued to make many lexical errors.

Surely one goal of second language instruction - although it may seem a distant one - is to help learners

achieve proficiency or competence in the second language which at least approximates that of the native speakers of that language. This study has investigated some areas of proficiency in writing. The performance of the NNS of this study is far from that goal of native speaker competence as measured against the writing of their NS peers, and that of considerably younger NS.

Classroom teachers, especially those trained in the audio-lingual tradition, have an extreme sensitivity to errors. That is, they often measure competence in the second language purely in terms of grammatical correctness. The results of this study showed no apparent improvement in grammatical correctness, no apparent decline in the type and frequency of errors in the writing of a group of "good" Grade 11 ESL learners as compared to that of Grade 9 ESL learners. Such failure to proceed along the path to perfection in the use of grammatical structures might well cause teachers to feel discouraged. However, as has been discussed, concentrating on errors alone without taking correct uses of certain structures into account gives a misleading picture of overall ability. There is also reason to believe that inability to master grammatical structures is not due to ignorance

of the rules but to failure to apply them, and does not
necessarily interfere with the ability to express oneself,
prolifically, coherently and effectively - as the NNS11
students of this study managed to do in many cases - in
the second language. Still, as compared to their NS peers
there is much room for greater achievement in the areas
of syntactic and lexical development.

Certainly, competence or proficiency in a language
includes grammatical competence and the learning and
practice of grammatical rules. But this does not imply
that the development of competence in other areas of the
language should be postponed until every trace of grammat-
ical error is eradicated. The classroom teacher who wishes
to aid the development of competence in his second language
learners should not set aside all his grammar books and
exercises. But there are other areas of language skill -
such as syntactic and lexical proficiency - that also
merit attention. In the limited time available for second
language study in the classroom - the main source of input
for the NNS subjects of this study - perhaps the teacher
may help his students towards the goal of all-round
second language competence by creating opportunities for
learning that embrace areas of proficiency other than the

structural, areas which are often overlooked yet which
are equally well developed in the competence of a native
speaker.

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APPENDICES

APPENDIX 1

QUESTIONNAIRE ADMINISTERED TO /ENGLISH-SPEAKING STUDENTS

Concordia University

Please return this questionnaire with your composition. Be sure your name is on both the questionnaire and the composition.

1. What was the first language you learned?

   _____

2. Do you _now_ speak any language as well as (or better than) you speak English?

   Yes ___   No ___

   If yes, which language? _____

3. At what age did you begin attending English schools? _____

APPENDIX 2

EXAMPLE OF A HAND-WRITTEN COMPOSITION AND
THE COMPUTER PRINT-OUT FORM (NNS9L)

The great toys robbery
The gangsters take the toys of Santa Claus. They
go in the saloon and play. The heroe go in the saloon.
He says: "Can I play too?" When the gangsters say: "Get
out". The heroe goes out. The Santa Claus and the
heroe go in the saloon and the gangsters and them fight. When
the gangsters go out the saloon, the heroe who
want to fight his horse with his guitar, assome
the gangsters accidentaly. The Santa Claus give him
the toy car and the heroe goes.

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0097 <239-3206-C01
0098 THE GREAT TOYS ROBBERY
0099 THE GANGSTERS TAKE THE TOYS OF SANTA CLAUS. THEY
0100 GO IN THE SALOON AND PLAY. THE HEROE GO IN THE SALOON.
0101 HE SAYS: "CAN I PLAY TOO?" WHEN THE GANSTERS SAY: "GET
0102 OUT". THE HEROE GOES OUT. THE SANTA CLAUS AND THE SHERIFF
0103 GO IN THE SALOON AND THE GANSTERS AND THEM FIGHT. WHEN
0104 THE GANGSTERS GO OUT THE SALOON, THE HERO WHO
0105 WANT TO FIGHT HIS HORSE WITH HIS GUITAR, ASSOME
0106 THE GANGSTERS ACCIDENTALLY. THE SANTA CLAUS GIVE HIM
0107 THE TOY CAR AND THE HEROE GOES.
0108 *FIN
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APPENDIX 3

EXAMPLES OF A TYPICAL COMPOSITION WRITTEN
BY A STUDENT AT EACH GRADE LEVEL

Grade 6 in an English School (NS6E)

030-ANG6-C01

THE GREAT TOY ROBBERY

IT STARTED LIKE THIS WELL ONE DAY SANTA WAS RIDING THREW
THE DESERT AND 3 MEN WERE WAITING ON A CLIFF TO ROB HIM.
SO THEY WENT DOWN AND ROBBED HIM AND THE 3 MEN WENT TO
TOWN AND WENT INTO A SALOON. EVERYBODY WAS HAVING A GOOD
TIME UNTILL THE 3 MEN CAME IN AND EVERYBODY LEFT. A GIRL
JUMPED INTO A PIANO AND THEN A MAN WENT IN. THEN A COWBOY
CAME IN TOWN SINGING. HE WAS GOING TO THE SALOON AND HE
TOLD HIS HORSE TO STOP BUT IT DIDN'T SO HE HIT IT ON THE
HEAD. THEN IT STOPED HE GOT OFF AND WENT INTO THE SALOON.
HE WENT UP TO THE BAR AND THEN A BALL HIT HIM ON THE HEAD.
THE COWBOY ASKED TO PLAY AND THEY SAID "NO"! SO HE BACKED
UP AND RAN OUT. THE SHERIFF CAME WITH SANTA AND ASKED THE
COWBOY IF HE KNEW WHERE THE TOYS WERE HE SAID "IN THE
SALOON." SO THEY WALK IN AND THEY RAN BECAUSE OF BULLETS
AND THE GUN MEN ESCAPE. THE COWBOY TOLD HIS HORSE TO GO
BUT HE DIDN'T SO THE COWBOY WENT TO HIT HIM BUT INSTEAD
HE HIT THE 3 MEN. SANTA TOLD HIM TO TAKE A GIFT SO HE DID
HE TOOK A CAR. HE JUMPED IN IT AND DROVE AWAY. THEN SANTA
LEFT FOR HOME.
THE END.
FIN

Grade 6 in a French School (NS6F)

059-AN06-C01

THE GREAT TOY ROBBERY.
SANTA WAS COMMING BACK FROM THE NORTH-POLE WITH ALL HIS
TOYS.   THREE GANSTERS WERE WATCHING HIM FROM UP THE HILL.
ALL OF A SUDDEN THEY WENT AND STOPED SANTA AND TOLD HIM TO
GIVE THEM ALL HIS TOYS.   SANTA GAVE THEM ALL THE TOYS AND
THEN THEY LEFT.   THEY WENT TO A BAR THAT WAS CALLED
"SALOON" AND SCAIRD EVERYBODY OUT OF THE PLACE.   AFTER
EVERYBODY WAS GONE THEY STARTED TO PLAY WITH ALL THE TOYS.
OUTSIDE EVERYBODY WAS LOOKING AT A CHRISTMAS TREE BUT THERE
WAS NO TOYS UNDER THE TREE.   SANTA CAME BACK WITH THE SHER-
IFF AND ASKED A COWBOY IF HE HAD SEEN THE 3 ROBBERS, HE SAID
"YES".   HE SAID IN THE BAR.   SANTA WENT IN WITH THE SHERIFF
AND SCAID THE ROBBERS OUT.   WHEN THE ROBBERS WERE OUT THEY
STAYED NEER THE DOOR AND THE COWBOY THAT WAS TRIYING TO GET
HIS HORSE TO START MADE HIS GUITAR GO BACK AND FORTH AND
WHEN HE MADE IT GO BACK HE HIT ALL THREE ROBBERS THAT FELL
ON THE GROUND.   THE SHERIFF CAME OUT WITH SANTA SHOOK THE
COWBOY'S HAND AND SANTA TOLD HIM TO HAVE A TOY.   AFTER HIT-
TING HIS HORSE WITH GUITAR THE HORSE LEFT SO FAST THE HE
DROPPED THE COWBOY, SO THE COWBOY IN ALL THE TOYS HE TOOK
A SMALL CAR.
FIN

Grade 8 (NS8)

516-ANO8-C01

COMPOSITION

ONE DAY WHILE SANTA CLAUS IS BRINGING TOYS TO A TOWN HE
GETS HELD UP BY THREE ROBBERS. THE THREE MEN TOOK THE TOYS
AND RODE INTO TOWN. THE ROBBERS OPENED THE BAG AND STARTED
TO PLAY WITH THE TOYS, THEN THE HERO WALKED IN AND ASKED IF
HE COULD PLAY, THEY SAID NO. THE THREE MEN THREW SOMETHING
AT HIM AND THE HERO RAN OUT. THE SHERIFF AND SANTA CLAUS
CAME, AND WENT INTO THE SALOON, AND HAD A SHOOT OUT WITH THE
ROBBERS. THE ROBBERS WALKED OUT OF THE SALLOON BACKWARDS
AND THE HERO HIT THEM ON THE HEAD BY ACCIDENT. SANTA CLAUS
GAVE THE HERO A TOY AND GOT IN HIS SLED AND RODE OFF.
FIN

Grade 9 (NS9)

600-09-C01

THE GREAT TOY ROBBERY

THIS STORY TAKES PLACE OUT IN THE WEST AROUND CHRISTMAS
TIME. THE HERO, A COWBOY IN WHITE, IS TRAVELLING THROUGH
THE DESERT TOWARDS A TOWN. SANTA CLAUS IS TRAVELLING THERE
ALSO BUT THREE MEN DRESSED IN BLACK HOLD HIM UP. SANTA CLAUS
STICKS UP HIS ARMS AND HANDS OVER THE TOYS AND THE VILLANS
RIDE AWAY. MEANWHILE THE HERO COMES RIDING INTO TOWN PLAY-
ING THE GUITAR. THEN THE VILLANS COME. THEY GO INTO THE
SALOON. THE DANCING LADY AND THE PIANO PLAYER JUMP INTO THE
PIANO. THE BAR MAN GIVES THEM THREE BOTTLES OF BEER. THE
VILLANS DRINK THE BEER AND THROW THE EMPTY BOTTLES OVER THEIR
SHOULDERS. THEY THEN START TO PLAY WITH THE TOYS. THE HERO,
OUTSIDE THE SALOON, STOPS HIS HORSE BY CLOBBERING IT OVER
THE HEAD WITH THE GUITAR. HE WALKS INTO THE SALOON BUT THE
VILLANS TELL HIM TO GET LOST. SANTA CLAUS AND THE SHERRIF
COME UP AND THE SHOOTING STARTS. THE VILLANS WALK OUT AND
THE HERO, WHO IS TRYING TO START HIS HORSE CLOBBERS THE MEN.
THEY FALL DOWN UNCONCIOUS. SANTA CLAUS LETS THE HERO HAVE
A TOY. THE HERO TAKES A RED CAR AND DRIVES AWAY.
FIN

Grade 10 (NS10)

503-AN10-C01

THE GREAT TOY ROBBERY

THE FILM STARTS OF WITH A COWBOY HERO DRESSED IN WHITE
RIDING A WHITE HORSE THROUGH THE DESERT. SANTA CLAUS IS
RIDING THROUGH THE DESERT, WHEN HE IS HELD UP BY THREE MEAN
LOOKING MEN, WHO STEAL HIS SACK OF TOYS. MEANWHILE OUR HERO
RIDES INTO TOWN SINGING AND PLAYING HIS GUITAR. HE IS
WISHED BY THE MAYOR AND GOES ON TO THE SALOON BUT HIS HORSE
WON'T STOP. THEN THE THREE MEN COME INTO TOWN, AND AS SOON
AS THE PEOPLE IN TOWN SEE THEM THEY ALL GO INTO HIDING. THE
THREE MEN GO INTO THE SALOON WHERE THEY EACH HAVE A DRINK.
AFTER THEIR DRINK THEY START TO PLAY WITH THE TOYS THEY STOLE
FROM SANTA. OUR HERO FINALLY STOPS HIS HORSE BY BANGING IT
WITH HIS GUITAR. HE GOES INTO THE SALOON AND IS HAVING A
DRINK WHFN HE SEES THE MEN PLAYING WITH THE TOYS, HE ASKS
THEM IF HE CAN PLAY, BUT THEY WON'T LET HIM AND HE RUNS OUT
OF THE SALOON. HE GETS ON HIS HORSE BUT IT WON'T GO, THEN
THE SHERIF AND SANTA COME ALONG AND GOES INTO THE SALOON.
THERE IS A SHOOT-OUT BETWEEN THE THREE MEN AND THE SHERIF.
THE THREE MEN RUN OUT OF THE SALOON AS OUR HERO BANGS HIS
HORSE WITH HIS GUITAR WHICH ALSO HITS THE THREE MEN. HE IS
CONGRATULATED BY THE SHERIF AND IS PERMITED TO TAKE ONE OF
THE TOYS. HE TAKES A LITTLE RED CAR AND RIDES INTO THE
NIGHT.
FIN

Grade 11 (NS11)

675-11-C01

THIS CARTOON, THE GREAT TOY ROBBERY, TOOK PLACE IN THE WILD
WEST. AT THE BEGINNING THE NARRATOR SPOKE OF QUALITIES OF
THE COWBOY, IN PARTICULAR THEIR BRAVERY. SOME COWBOYS,
HOWEVER, ARE NOT VERY BRAVE AS LATER EVENTS PROVE.

SANTA CLAUS WAS CROSSING THE DESERTS OF THE WEST. WHEN HE
WAS STOPPED BY THREE MEN WITH GUNS. THEY MADE OFF WITH
SANTA'S TOYS AND HEADED FOR THE NEAREST TOWN. THEIR APPEAR-
ANCE IN THE LITTLE TOWN CAUSED FEAR AMONG THE INHABITANTS.
THIS WAS ESPECIALLY NOTICABLE WHEN THE THREE MEN ENTERED A
SALOON. EVERYONE IN THE SALOON QUICKLY DISAPPEARED. THE
BAR MAN DUCKED BEHIND THE COUNTER, GETTING UP ONLY TWO GIVE
THE THREE MEN DRINKS. THEN, THE THREE CRIMANALS BEGAN TO
PLAY WITH THE TOYS THEY HAD STOLEN FROM SANTA.

MEANWHILE ANOTHER MAN HAD ENTERED TOWN, A YODELLING COWBOY
WITH A DISOBEDIANT HORSE. IT TOOK THE COWBOW QUITE SOME
TIME TO MAKE HIS HORSE STOP. IN FACT, HE WAS FORCED TO HIT
HIS HORSE ON THE HEAD WITH A GUITAR BEFORE THE ANIMAL WOULD
STOP. THE COWBOY ENTERED THE SALOON, INADVERTANTLY PUTTING
IN HIS FOOT IN A SPITTOON. HE NOTICED THE THREE MEN PLAYING
HAPPILY WITH THEIR TOYS. THE COWBOY ASKED IF HE COULD PLAY
BUT THE THREE MEN DREW THEIR GUNS. IN A PANIC, THE COWBOY
RAN FROM THE SALOON AND JUMPED ON HIS HORSE. HOWEVER, THE
COWBOYS HORSE WOULD NOT MOVE.

THE COWBOY WAS TILL ON HIS HORSE WHEN SANTA CLAUS AND THE
SHERRIF WENT INTO THE SALOON TO CAPTURE THE TOY THIEVES.

Grade 11 (NS11) (Cont'd)

THERE WAS GUNPLAY. BUT THE THREE ROBBERS ESCAPED THROUGH
THE FRONT DOOR.

THE COWBOY DID NOTICE THE MEN. HE WAS BUSY TRYING TO GET
HIS HORSE TO MOVE. FINALLY, HE PICKED UP HIS GUITAR AND
SWUNG IT, HOPING THAT HIS HORSE WOULD START IF HE HIT.
INSTEAD THE COWBOY KNOCKED OUT THE THREE CRIMINALS. NOW,
THE COWBOY WAS A HERO. IN GRATITUDE, SANTA CLAUS ALLOWED
THE COWBOY TO CHOOSE HIS REWARD FROM HIS BAG OF TOYS. THE
COWBOY CHOSE A TOY CAR TO REPLACE HIS STUBBORN HORSE.
FIN

<u>Grade 9 (NNS9)</u>

206-3205-C01

GREAT TOY ROBBERY

THEY HAVE A COW-BOY WHIT HIS HORSE GOES ON THE DESERT THE
HORSE STOP TO EAT A FLOWER AND THE COW-BOY SAID TO HIS
HORSE GO AND THE HORSE HAVE A PIG HEAD SQ THEY STAY THERE.
WHEN THE SANTA CLAUSE COMES THEY HAVE THREE GUYS WHO STOP
THE SANTA CLAUSE AND THEY TOOK THE TOY BAG AND THEY GOES.
WHEN THEY ARRIVED IN THE VILLAGE THEY GOES TO THE BAR SALOON
AND THEY BREAK EVERY THING IN THE BAR THEY TOOK SOME BOTLES
AND THEY DRINK AFTER THEY PLAY WHIT THE TOY THE COW-BOY COMES
HE SAY TO THE 3 GUYS CAN I PLAY WHIT YOU AND THE GUY SAID
GET OUT OF HERE AND THE GUY GET OUT AND THE SANTA-CLAUSE TELL
HIM DO YOU SEE THE GUYS.
FIN

Grade 11 (NNS11)

305-5202-C01

THE GREAT TOYS ROBBERY

A DAY, IN A DESERT, A YOUNG COWBOY WITH HIS HORSE WERE WALK-
ING DOWN THE ROAD. THE YOUNG COWBOY WAS PLAYING GUITAR AND
SUDDENTLY THE HORSE STOPPED IN FRONT OF A FLOWER. FIRST HE
SMELLED IT AND THEN HE SWALLOWED IT.

THEN THE STORY BEGAN WITH THE SANTA CLAUS IN HIS SLED WHO
WAS RUNNING DOWN THE ROAD WITH A FULL BAG OF PRESENTS. BUT,
NOT FAR FROM HIM THREE MEN ON THEIR HORSES WERE LOOKING AT
HIM WITH SOME BINOCULARES AND WITH THE IDEA TO STEAL HIS
PACKAGE. SO THEY STOPPED HIM WITH GUNS AND STOLE HIS BAG
AND THEY'RE GONE WITH THE WIND. AFTER THE GANG, ARRIVE AT
THE VILLAGE AND MADE EVERYBODY SCARED, ALL THE PEOPLE QUIT
THE PLACE RIGHT AWAY. EXCEPT THE BARMAN, HE GAVE THREE
BOTTLES OF WHISKY AND THE MEN DRANK AND PITCHED THEIR BOTTLES
AWAY. THEY STARTED TO PLAY WITH THE TOYS LIKE AN AIRPLANE,
YO-YO, BALLOON. THEN THE COWBOY ARRIVE IN THE SALOON AND
HE ASKED IF HE COULD PLAY, BUT THE MEN DIDN'T TO AND THEY
SCARED THE YOUNG MAN WITH THEIR GUNS.

HE WANTED TO LEAVE THE PLACE BUT HIS STUPID HORSE DIDN'T
WANT TO. THEN THE SANTA CLAUS AND THE SHERIFF ARRIVE TO
ARREST THE GANG. THEY ENTERED INTO THE SALOON BUT THE FIGHT
STARTED. THE SHERIFF WERE HIDDEN BEHIND A TABLE AND THE
MEN BEHIND THE PIANO AND SHOOT BULLETS WITH THEIR GUNS.
THEN THE THREE MEN LEFT THE PLACE BUT OUTSIDE THE YOUNG
WAS THERE AND HE WAS TRYING TO HIT HIS HORSE WITH HIS GUI-
TAR BUT HE MISSED, AND HIT THE THREE MEN AT THE SAME TIME,
AND KNOCKED THEM. SO THE SHERIFF COULD ARREST THEM EASILY.

THE SANTA CLAUS GAVE A PRESENT TO THE COWBOY FOR THIS
ARRESTATION. HE GAVE TO HIM A NEW CAR WITH PEDALS. AND
THEN THE COWBOY WAS HAPPY FOR THIS PRESENT BECAUSE HE COULD
FORGET HIS HORSE AND RIDE HIS CAR BY HIMSELF.

AFTER THE ARRESTATION EVERYBODY CONTINUED TO HAVE FUN AND
THEY MADE PARTY FOR CHRISTMAS. THE SANTA CLAUS PUT THE
PRESENTS BESIDE THE BIG TREE DOWN THE ROAD.
FIN

APPENDIX 4

EXAMPLES OF WORDS CONSIDERED MISSPELLED
OCCURRING IN ERROR-FREE T-UNITS

Correct Spelling	Misspelling
caught	coutch*
	cot
	cout
	caut
	cought
celebrating	celebrathing*
gangsters	gagsters
	gansters
	ganthers*
guitar	guitare*
	guatir
	guter
	guatar
	gitar
	citar
	gatar
	gutar
his	is
is	his*
horse	hourse
	houres
	hores
	hours

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*These misspellings occurred only in the compositions
written by NNS.

Correct Spelling	Misspelling
jumped	junped
	gumped
	jumpt
sack	sac
Santa Claus	Santa Clause
	Santa Claude
	Santa Class*
	Santa Clous*
	Santa Closs
	Santa Caws
	Santiclos
	Santa Claws
	Santa Cluse
	Sant
	Santa Cluss
steal	still*
	steel
three	tree*
	thee
while	will

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*These misspellings occurred only in the compositions written by NNS.

APPENDIX 5

OTHER ERROR CATEGORIES AND EXAMPLES

Error Category	Example
Was/were	The sheriff were hidden behind a table ... (NNS11L)
Subject/Verb Agreement (Be)	There are many fun in this place because there are a piano bar.... (NNS11L)
Word Order	The mexican as a long face brown. (NNS11L)
Don't = Doesn't	But his horse don't want to move. (NNS9L)
Over-Regularized Past	The barman puted three bottles out the bar ... (NNS11L)
Copula 's Missing	It a beautiful day, in the desert. NNS11L)
Wrong Possessive Adjective	Near him many persons are attending for our presents near the Christmas tree. (NNS11L)
Have = There is/are	They have three robber who gome to see Santa Claus ... (NNS11L)
Inflected Infinitive	The bottle is going to broke an instant after ... (NNS11L)

Error Category	Example
Missing Possessive Marker	Do you see the Santa Claus toys? (NNS9L)
Man = Men	There is 3 man with a black cap. (NNS11L)
Men = Man	A men arrive and ask if he could play. (NNS11L)
Extra Word	... a king of glaces that it permitted us to see at a long distance. (NNS11L)
Over-Regularized Plural	When he entere on the saloon it was just the thee bad mans who playing with their games. (NNS11L)
Uninflected Past Participle	The bad guys are now knock out. (NNS11L)
Genitive	They go in the way of Santa Claus. (NNS11L)
Double Subject	The little man he's very happy. (NNS9L)
Miscellaneous	It has few water. It's now a big fight between the sherif Santa Clause and the bad boys. (NNS11L)