HE LOOK THE WORLD: A STUDY OF ENGLISH PREPOSITION
USE IN THE SPEECH OF FORMALLY INSTRUCTED SECOND
LANGUAGE LEARNERS

Gabriella F. Moro

A Thesis

in

The TESL Centre

Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts in Applied Linguistics
at Concordia University
Montréal, Québec, Canada

August 1981

© Gabriella F. Moro
ABSTRACT

HE LOOK THE WORLD: A STUDY OF ENGLISH PREPOSITION USE IN THE SPEECH OF FORMALLY INSTRUCTED SECOND LANGUAGE LEARNERS

Gabriella F. Moro

This study was undertaken to examine English preposition use by formally instructed second language (L2) learners. Two groups of francophone students at different stages of English language instruction were selected for the investigation, and two types of oral data were examined for each group: L2 classroom speech and L2 speech elicited during an oral communication task.

Data were analyzed in terms of range of preposition forms used (including contexts where a particular form was required but not supplied), accuracy, and types of errors.

Results from the analysis of the classroom data indicated that, for the most part, both groups of learners practised similar English prepositions in the L2 classroom, and accuracy on preposition use was very high.

Results from the analysis of the oral communication task data indicated that accuracy on preposition use by both groups was considerably lower than that obtained in the classroom. The most common preposition error made by the learners occurred with the locatives on and in. Although overall accuracy scores were similar for both groups of learners, learners at the later stages of L2 instruction attempted a wider range of preposition forms and generally produced many more instances of prepositions, as they talked more than the learners at the early stages of instruction, while performing the same task.
ACKNOWLEDGEMENTS

I would like to thank a number of people who have assisted in the carrying out of this study. The impetus for the study came with the opportunity to join the ESL Teaching and Learning Project, working as a research assistant under the guidance of the directors, Bruce Barkman and Patsy Lightbown.

First, I wish to thank Bruce Barkman, my advisor, for his patience and guidance throughout the preparation of this thesis.

I am also grateful to Catherine Paure, for her assistance in preparing the transcripts in computer print-out form, and for her typing of the final draft of the thesis. Her careful attention to detail is greatly appreciated.

Finally, I would like to thank Professors Patsy Lightbown and Molly Petrie, and fellow graduate students Leslie Paris and Diane Malcolm, whose interest and concern were an ongoing source of encouragement.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iv</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>v</td>
</tr>
<tr>
<td>List of Tables</td>
<td>vii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>viii</td>
</tr>
<tr>
<td><strong>CHAPTER I - INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td>Acquisition of English Prepositions in the L&lt;sub&gt;1&lt;/sub&gt;</td>
<td>2</td>
</tr>
<tr>
<td>Acquisition of English Prepositions in the L&lt;sub&gt;2&lt;/sub&gt;</td>
<td>4</td>
</tr>
<tr>
<td>Rationale for this Study</td>
<td>7</td>
</tr>
<tr>
<td>Background to the Study</td>
<td>8</td>
</tr>
<tr>
<td>Scope and Purpose of the Thesis</td>
<td>12</td>
</tr>
<tr>
<td><strong>CHAPTER II - SUBJECTS AND PROCEDURES</strong></td>
<td></td>
</tr>
<tr>
<td>Description of Subjects</td>
<td>13</td>
</tr>
<tr>
<td>Data Collection</td>
<td>13</td>
</tr>
<tr>
<td>Procedures for Analysis</td>
<td>19</td>
</tr>
<tr>
<td><strong>CHAPTER III - RESULTS</strong></td>
<td></td>
</tr>
<tr>
<td>Preposition Use in ESL Classroom Speech</td>
<td>28</td>
</tr>
<tr>
<td>Preposition Use in L&lt;sub&gt;2&lt;/sub&gt; Speech - PCG</td>
<td>34</td>
</tr>
<tr>
<td>Analysis of preposition errors - PCG</td>
<td>39</td>
</tr>
<tr>
<td><strong>CHAPTER IV - DISCUSSION</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom Results</td>
<td>45</td>
</tr>
<tr>
<td>PCG Results</td>
<td>47</td>
</tr>
<tr>
<td>Errors in Preposition Use - PCG</td>
<td>52</td>
</tr>
</tbody>
</table>
CHAPTER V - SUMMARY AND CONCLUSIONS

References

Appendix 1  Pictures from the Picture Card Game
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of Subjects per Group and Data Type</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Calculation of Total Number of Instances</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Total Number of Instances of Prepositions and Group Accuracy Scores - ESL Classroom Speech</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>Group Accuracy Scores for Most Frequent Prepositions - Classroom Speech: Grade 10</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>Number of Instances of Prepositions Attributed to Particular Practice Conditions - Grade 10, Classroom Speech</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>Total Number of Instances of Prepositions and Group Accuracy Scores - PCG</td>
<td>35</td>
</tr>
<tr>
<td>7</td>
<td>Group Accuracy Scores for Most Frequent Prepositions - PCG: Grade 6L</td>
<td>36</td>
</tr>
<tr>
<td>8</td>
<td>Group Accuracy Scores for Most Frequent Prepositions - PCG: Grade 10</td>
<td>37</td>
</tr>
<tr>
<td>9</td>
<td>A Comparison of Grade 6L and Grade 10 Group Accuracy for Most Frequent Prepositions - PCG</td>
<td>39</td>
</tr>
<tr>
<td>10</td>
<td>Number and Type of Preposition Errors - PCG: Grade 6L</td>
<td>40</td>
</tr>
<tr>
<td>11</td>
<td>Number and Type of Preposition Errors - PCG: Grade 10</td>
<td>41</td>
</tr>
<tr>
<td>12</td>
<td>Overall Accuracy on Prepositions in the PCG: Group 6L and Sub-groups 6B and 6A+C</td>
<td>49</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Categories of Classroom Practice</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>Examples of <em>On/In</em> Substitution Errors - PCG</td>
<td>43</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

This study focuses on English preposition use by francophone second language \( L_2 \) learners whose principal exposure to English is in the \( L_2 \) classroom. More specifically, I am interested in describing learners' performance on English prepositions as revealed by their \( L_2 \) speech produced under two different sets of conditions.

English prepositions are inherently complex in terms of both their grammatical and semantic description. A review of some major grammatical studies of the English language (both historical and contemporary), as well as standard handbooks (e.g., Francis, 1958; Fries, 1940, 1952; Quirk, Greenbaum, Leech & Svan, 1972) reflects this complexity. Studies such as Clark's (1973), which discusses locative and temporal prepositions, reveals the semantic complexity of this form class.

From the viewpoint of English as a second language (ESL) instruction, prepositions are difficult to explain and teach because the choice of the correct preposition is often determined not by an easily stated rule, but by the particular lexical item with which the preposition
occurs. Consider, for example, the following pair of sentences: She's going to Quebec City vs. She's leaving for Quebec City. The two sentences are similar in meaning but, in each case, the particular verb employed governs the choice of the particular preposition that must follow in order for each sentence to comply with standard English usage.

For L2 learners, the additional factor of interference from the mother tongue may further complicate the already difficult rules for preposition use in English. Prepositions simply do not lend themselves to either straightforward translation or to simple rule learning.

Findings from a number of studies, both in first and second language learning, generally indicate that English prepositions are difficult to acquire. In the following pages, previous research in first language (L1) and second language (L2) learning which has relevance to this study will be presented.

Acquisition of English Prepositions in the L1

Data on the acquisition of English prepositions by L1 learners are scanty. Brown (1973), in his longitudinal study of the acquisition of fourteen English grammatical morphemes, reports that the first prepositions
to appear consistently in his three subjects' speech were
on and in, in their locative functions. These two pre-
positions came into the subjects' speech at about the
same time, and apparently before any other English prepo-
sitions. The early acquisition of on and in is also
reported by de Villiers and de Villiers (1970) in their
cross-sectional study of the acquisition of English gram-
matical morphemes by 21 subjects. Other studies reporting
on "early" prepositions in L1 acquisition describe chil-
dren's difficulties with in, on and under (e.g., Clark,

As Durkin (1981) points out, "while early attain-
ments are important, they do not indicate a complete
grasp of the entire word class and its uses" (p. 48).
Findings from the Durkin study, which pays particular
attention to the acquisition of between, but also dis-
cusses a variety of developments in the comprehension of
in front of, behind, below, above and near, show that the
acquisition of English prepositions in the L1 continues
at least through the primary school years (Subjects’ ages
in the Durkin study ranged from 3 years and 10 months,
to 7 years and 10 months).

Though a uniform data base on the development of
English preposition use by native speakers is lacking,
there is strong evidence to show that prepositions are
a frequent source of error (see also Manyuk, 1969), and that control of all the restrictions on the use of prepositions is a relatively late acquisition.

**Acquisition of English Prepositions in the L₂**

A few studies in second language acquisition research report on learners' difficulties in using English prepositions.

Scott and Tucker (1974), in an investigation of the English language proficiency of Arabic-speaking L₂ learners, provide a rank ordering of their subjects' areas of difficulty in English, based on both oral and written data. Prepositions ranked high on the list of difficulties—second, after finite verbs. Incorrect usage of prepositions, calculated as a percentage of total prepositions used, was over 20% at the beginning of a semester of ESL instruction (at a high intermediate level). Though preposition errors decreased by the end of the semester of intensive instruction, errors persisted significantly (over 14% in both modalities).

ESL learners' difficulties with English prepositions are also reported by Khampong (1974). A diagnostic test was administered to adult ESL learners to find out the relative difficulty of particular English prepositions of time and place for L₂ learners of various L₁ backgrounds. The prepositions investigated were: at, by,
for, from, in, on, to and Ø. The 45-item diagnostic test was equally divided into three sections: multiple choice, error correction and cloze. Findings based on the scores of this test show that the $L_1$ of the various groups did not seem to affect the subjects' performance. That is, problems with English prepositions were shared by all groups, regardless of their respective mother tongues (viz., Thai, Japanese, Spanish, and a mixed group of Italian, Chinese, Arabic and Portuguese). The range of mean scores, across the four language groups, was 23.7% to 27.75 out of 45 items. Furthermore, sex, age, number of years and number of hours per week of ESL instruction were not, according to Khampong, correlated with accuracy in preposition use.

$L_2$ learners' difficulty with English prepositions, regardless of $L_1$ background, is also reported in a paper by Richards (1971). The author's discussion focuses on several error types, including prepositions, which he argues do not derive from transfer from the mother tongue. Specific examples of non-transfer errors cited by the author were drawn from diverse studies of ESL learners from a variety of $L_1$ backgrounds. These errors, Richards states, are representative of the sort of errors we might expect from anyone learning English as a second language. The linguistic origins of non-transfer errors are found
almost exclusively within the structure of English itself, and learners make errors because they sometimes apply a particular rule of English to contexts where the rule does not apply.

It is difficult to judge the adequacy of such an explanation for errors, as Richards does not specify the \( L_1 \) of the learner(s) who produced particular errors. Nor is there any information included as to learners' ages, the \( L_2 \) learning environment, or the learners' level of proficiency in English at the time the original data were collected.

A general observation reported by Mougeon and Canale (1978) is that certain English prepositions in specific linguistic environments are used correctly very early by \( L_2 \) learners. These prepositions in other environments and other prepositions are not used correctly where they are obligatory until much later, and some prepositional functions are acquired only by the most advanced learners, if at all.

It is evident from the studies summarized that many questions remain unanswered regarding the acquisition of English prepositions, both in the \( L_1 \) and the \( L_2 \). To attempt a comparison of any of the above mentioned studies is not feasible in cases where adequate information is
lacking. Where such information is provided, a comparison of the studies with each other is not really possible either, due to the differences in types of data collected, language background of the learners (in the case of L2) and procedures for analysis and computation of what is "correct" or "incorrect". Nor is it possible with the findings of these studies to come to any conclusions either about the order of acquisition of particular English prepositions, or of prepositions compared with other English structures.

**Rationale for this Study**

Most common English prepositions occur frequently in native speaker discourse, regardless of the subject of communication (Fries, 1940, 1952; Carroll, Davies & Richman, 1971). A preliminary examination of the ESL classroom instructional materials used by the subjects in this study revealed that quite a number of common English prepositional forms and functions were introduced in the early stages of ESL instruction and practised often. As was suggested earlier, explicit instruction of the rules for preposition use is not always possible. Findings from language learning studies seem to indicate that the acquisition of English prepositions is characteristically a lengthy process, for both native speakers
and ESL learners. In addition, there appears to exist a range of difficulty in the acquisition of English prepositions. Previous L₂ research investigating the acquisition of English prepositions has not, to this researcher's knowledge, included ESL classroom speech in the data base, despite the fact that subjects in some of the studies (e.g., Scott & Tucker, 1974) were learning English as a foreign language in a classroom setting. Therefore, it was decided to investigate English preposition use by formally instructed L₂ learners, using student speech transcribed from their ESL classroom sessions.

Background to the Study

The present study evolved through various stages, its original design being somewhat modified as results obtained from preliminary analysis did not yield adequate information. The subjects in the present study form part of the total subject population in an ESL teaching and learning project (Lightbown & Barkman, 1978)¹ begun in 1977. The learners under investigation were students enrolled in ESL classes at various grade levels. At the

¹The ESL Teaching and Learning Project, with P.M. Lightbown and B. Barkman of Concordia University as principal investigators, was funded primarily by the Language Programs Branch, Department of the Secretary of State of Canada, and by the Social Sciences and Humanities Research Council.
start of the Lightbown and Barkman study, the subject population was as follows: three classes of grade 6 students, two classes of grade 8 students and two classes of grade 10 students. Further description of the subjects is included in Chapter II.

The total database for the Lightbown and Barkman research includes a variety of oral and written samples of learners' English, collected over a three-year period. Transcripts from ESL classroom sessions of the seven classes under observation during the 1977-78 academic year were available in computer-readable form.

The original intent of my investigation was to examine L2 learners' use of English prepositions in the ESL classroom and describe their performance on prepositions as revealed by the L2 speech produced in the classroom. A preliminary examination of the classroom transcripts of one of the grade 10 classes revealed not only that prepositions occurred frequently in the learners' L2 speech, but also that learners' speech was produced under a fairly limited set of conditions that were highly controlled. It was decided, therefore, to also examine preposition use by the same learners as revealed in speech produced under different conditions - an oral communication task. Transcripts of speech elicited from grade 10 students (during the oral task) were available in computer-
readable form for most of the students in the same grade 10 class. Three students were no longer attending school when the task was administered. It was felt that an analysis of the $L_2$ speech produced during an oral communication task would reveal additional information about the grade 10 learners' use of prepositions - information that would quite possibly differ from the findings of the classroom speech analysis.

Another question concerned possible differences in preposition use and performance between groups of learners at different stages of ESL instruction. That is, what differences might be found, in terms of English preposition use, between formally instructed learners in the early stages of ESL instruction and those in the later stages of instruction?

For this next part of the investigation, it was decided to examine, first of all, the ESL classroom speech data of a grade 6 group in the Lightbown and Barkman study. A close reading of the classroom transcripts for one of the three grade 6 classes (known as 6B in the Lightbown and Barkman study) indicated that English prepositions were quite frequent in the students' speech and that language practice conditions were, as for the grade 10 class, fairly limited and highly controlled.
Once again, it was decided to look at preposition use by grade 6 students as revealed by speech elicited during an oral communication task. At this point, a longitudinal study of preposition use by the grade 6 students was considered as a possibility, particularly since longitudinal data from the grade 6 students' oral communication task was available from the Lightbown and Barkman project. With this idea in mind, I therefore examined the oral task data from the grade 6 longitudinal subjects (6L). Almost one-third of the subjects in the 6L group were students in the 6B class, and the other subjects were students in the 6A and 6C classes. As the investigation progressed, it was decided that a longitudinal study was beyond the scope of this thesis. So, while a comparison of the classroom results and the oral task results, is, in the strictest sense, not possible for the grade 6 groups (i.e., 6B and 6L); there were, nevertheless, a number of reasons to support my belief that as groups, the grade 6B class and the grade 6L subjects were comparable for the purposes of this study.

First, almost one-third of the 6L subjects derived from the 6B class. Secondly, the portion of 6L subjects who were enrolled in other classes (i.e., 6A and 6C) were, when compared to 6B, similar in many respects. All of the grade 6 subjects in the Lightbown and Barkman
study were of similar socio-economic background, with the same L₁, attending the same school, receiving the same amount of ESL instruction from the same teacher, using the same instructional materials and methods, and having similar amounts of exposure to English outside school.

As such, there was little reason to believe that, as groups, 6B and 6L would differ in terms of second language behavior.

Scope and Purpose of the Thesis

The present study investigates English preposition use in the L₂ speech of formally instructed learners. It is a cross-sectional study of two groups of learners—one in the early stages of ESL instruction and one in the later stages. Learners' use of English prepositions is looked at in terms of the range of forms used, accuracy and types of errors.

The purpose of the study is two-fold: (1) to describe preposition use across two groups of learners at different stages of ESL instruction, and, (2) to describe learners' use of English prepositions as revealed by two types of oral data—the L₂ speech produced in the ESL classroom, and the speech elicited during an oral communication task.
CHAPTER II

SUBJECTS AND PROCEDURES

Description of the Subjects

The subjects for this study were francophone students studying English as a second language (ESL) at the grade 6 and secondary IV (grade 10) levels in public schools about 30 miles outside metropolitan Montreal (For group n, see Table 1). The students came from middle-class suburban and rural homes.

Table 1

Number of Subjects per Group and Data Type.

<table>
<thead>
<tr>
<th>Group</th>
<th>Data Type</th>
<th>Classroom</th>
<th>Oral Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 10</td>
<td></td>
<td>n = 28</td>
<td>n = 25</td>
</tr>
<tr>
<td>Grade 6B/6L</td>
<td></td>
<td>n = 26</td>
<td>n = 34</td>
</tr>
</tbody>
</table>

For most of the students, principal exposure to English was in their ESL classes, although some of them had opportunities to use English outside the formal
classroom setting. Outside exposure to English was largely from television and vacation trips to English-speaking areas, as was determined by a questionnaire administered at the beginning of the Lightbown and Barkman study.

Upon completion of secondary school, the students will have had approximately 1,000 hours of instruction in ESL, spread over a seven-year period, usually starting in grade 5. While provincial regulations in effect at the time the study was conducted required that francophone students begin the formal instruction of English no later than grade 5, the grade 6 students had actually begun to study English in grade 4, using the Look, Listen and Learn textbooks (Alexander, 1972). Most of the grade 10 students had begun receiving ESL instruction in grade 5 and used a variety of different materials in elementary school. All of the grade 10 students had been using the Lado/English Series (Canadian edition, 1971) since grade 7.

Data Collection

In the present study, two types of transcribed oral data from the Lightbown and Barkman study are analyzed: (1) ESL classroom sessions, and, (2) an oral communication task with the individual learners.
ESL classroom sessions. Audio recordings of the ESL classroom sessions were made with two tape recorders (AIWA cassette tape recorders) and two external microphones (Sennheiser studio cardioid microphones) set up in each classroom. Two previously trained observers, present at each classroom session recorded, took notes on non-verbal behavior considered necessary to the interpretation of ongoing L2 speech. They also wrote down as much student speech as possible, with corresponding student identification numbers as an aid to subsequent transcription. Generally, the same observers were present at all sessions of a particular class. Audio recordings were made at regular intervals throughout the school year. There were 15 half-hour sessions recorded for the grade 6B group and 11 hour-long sessions for the grade 10 group. These classroom interaction tapes, which have been fully transcribed and verified, represent 15 to 20% of the students' ESL classroom time for the school year.

Oral communication task. During the spring of the same school year, each subject met with an English-speaking adult interviewer to participate in an oral communication task, the Picture Card Game (PCG).¹

¹The Picture Card Game was devised by P.M. Lightbown and is based on a technique developed by J. Upshur (1971). This game, although similar in its design to the Upshur version, differs in its objectives, e.g., in Upshur's model, the scoring system is based solely on successful communication and the "test" is time. R. Yorkey drew the pictures.
This game was played and recorded in a small room near the students' ESL classrooms. The recording equipment used was the same as that used in recording the classroom sessions.

The PCG involves two participants - a student and an interviewer - and is played with seven groups of four cards (see Appendix 1). Each card in a group is thematically similar to the other three, but differs slightly in its details. For example, one group of cards has the same stick-figure person in every picture, but the person is engaged in a slightly different activity in each (e.g., opening a box/holding a box), or the person is positioned differently in each picture (e.g., standing/sitting), or the objects in the picture are located differently (e.g., in his hands/on the table). See for example, Picture Group 4 in Appendix 1.

The interviewer has two sets of cards. One set is arranged, one group at a time, facing the interviewer on a rack, so that it is impossible for the student to see the cards. The duplicate set is presented face down to the student. The procedure for the administration of the task is as follows (Lightbown & Barkman, 1977):

(1) The student is asked to choose one picture card from the set of four. The interviewer does not see which card has been selected.
(2) The student describes the picture to the interviewer, who has a duplicate group of cards in front of him.

(3) From the student's description, the interviewer guesses which card is being described, and verifies his choice by matching his card with the student's.

The above procedures are repeated for the seven groups of cards.

The purpose of the game (as used in the Lightbown and Barkman study) was not solely for the interviewer to guess the right picture on the basis of the student's description. The interviewer also tried to encourage the student to talk as much as possible. The picture groups were designed to elicit particular linguistic structures, mainly, the five [s] morphemes in English (i.e., the plural, possessive, third person singular, copula and progressive auxiliary) (see Lightbown & Malcolm, 1980). In addition, it was felt that the content of the pictures would naturally lead to the use of prepositions, particularly locative prepositions.

All students received similar instructions for the task as they began the game. The cue from the interviewer was: **Tell me about your picture. I'll try to guess which one you have.** During an initial trial run, the students were shown one group of pictures so they could see how
closely the pictures resembled one another. (A group of pictures other than the seven groups in Appendix 1 was used for the trial run, and data from the trial run were excluded from the analysis). The rules of the game were quickly understood by all students. Each student took approximately ten minutes to complete the seven groups of cards, though no time limit was set.

An important advantage of the PCG is that the same pictures can be used for learners at different levels of English proficiency. The same picture which elicits Oh, an accident!, or This is an accident, can also elicit a more complex structure, such as The truck crash into the side of the car. They're outside looking at the damage.

During the game, it was considered important to allow the students enough time to formulate their descriptions. Long pauses sometimes followed questions such as, What can you tell me about your picture?, What else do you see?, or Is there something else you can tell me? In order to avoid simple imitation and repetition, specific questions were used only when a student was having great difficulty describing the pictures.

The recorded oral communication tasks were fully transcribed and verified for subsequent analysis.
Procedures for Analysis

Identifying members of the linguistic class under investigation. English prepositions are not identifiable on the basis of inflectional markers, unlike English possessives and plurals. One possible approach for defining English prepositions is listing, but some prepositions are identical in form to words that have an adverbial function. For example, consider by and in in the following pairs of sentences:

(1) A bird flew by vs. He went by bus.
(2) He brought the cat in vs. Put the milk in the fridge.

English grammarians have attempted to delimit the class of prepositions using various approaches. In doing so, different grammarians have applied different sets of criteria, or combinations thereof. These criteria include: position in a sentence with respect to other form classes, prosodic features, and function in a sentence. No one of the approaches is completely satisfactory as a method for identifying English prepositions.

It is not within the scope of this thesis to report on all the problems of identifying prepositions, nor to discuss all of the relative merits and inadequacies of the methods employed to establish unambiguously the class
of English forms which are prepositions. Barkman (1966) has attempted to do so. For the purposes of this study, it was decided to identify prepositions on the basis of their graphic shapes in the transcribed data, relying on labels in contemporary English dictionaries and handbooks that provide lists of English prepositions. All occurrences of any of the listed forms, regardless of their lexical or syntactic functions, were considered in the present analysis. Thus, in sentences such as He brought the cat in, and He put the milk in the fridge, both occurrences of the form in would be counted.

Categories of preposition use. Tallying of English prepositions included actual occurrences of preposition forms as well as contexts requiring a preposition but where none was used. The analysis of the data has taken into account several dimensions of preposition use by L2 learners: use, overuse and omission. Some basic distinctions among these three terms are outlined below. Further elaboration and examples follow.

For the purposes of the present study, the term use describes a learner utterance that contains a preposition in a position that requires a preposition. Use may therefore be correct or incorrect. In the case of overuse, the learner produces a preposition in an utterance where
none is permitted. That is, the inclusion of a preposition is grammatically and/or contextually incorrect. Deletion of the preposition results in a correct sequence. Omission obtains when a learner utterance (or utterance segment) is grammatically and/or contextually incorrect and would become correct if a preposition were added. All instances of preposition use, overuse and omission were counted and analyzed.

Excluded from the count were instances of prepositions contained in false starts, or in utterances that appeared as incomplete on the transcripts due to noise interference or due to interruptions where, subsequently, the learner did not pick up the thread of his utterance.

In order to determine what constituted an error and what did not, native speaker judgement (using the analyst's variety of English as a guide) was relied on. Where the analyst was uncertain, standard grammar handbooks were consulted. Utterances of dubious correctness that derived from the published classroom materials were considered correct. Finally, utterances were not considered correct unless they were also contextually appropriate.

Procedures followed for tabulating correct use and errors for the prepositions (and contexts requiring
prepositions) in the $L_2$ speech of the learners are demonstrated below:

1. **correct use**

   Student (describing picture 1d): **The box of cookies is on the table.**

   Both **of** and **on** were used in accordance with standard English usage and appropriately reflect the semantic content of the picture being described. Therefore, the first preposition was counted as a correct instance of **of** and the second as a correct instance of **on**.

2. **incorrect use — substitution**

   Student (describing picture 3c): **They are on a party** (for **They are at a party**).

   Here, a preposition was used in a context requiring a preposition, but the wrong one was used. This instance was counted with **on** errors.

3. **overuse**

   Student (describing picture 3a): **He is blow out on the candles; where He is blowing out the candles would be appropriate.**

   In this case, the preposition **on** was used in a context where it is not allowed. This instance of overuse was counted with **on** errors (**Out** was counted as correct).
4. other incorrect use

Student (describing picture 5c): It's a car, is cogné on the truck.

Student (describing picture 5c): The truck is stopping in the car.

In each utterance, a preposition was used, neither one in accordance with standard English usage. Also, the general message conveyed by the second utterance contradicts what is depicted in picture 5c (see, Appendix 1). The preposition in the first utterance was counted with on errors, and that in the second, with in errors. Instances of incorrect use such as these were quite rare and were therefore not further categorized.

5. omission

Student (answering a question related to a story from the textbook): He look the world (for He is looking at the world).

In this case, a particular preposition, at, was required but absent. This instance was counted with at errors.

6. uncertain

Student (describing picture 6a): I see a brown school, with a yellow and red clock. With three boys running to school.
The first instance of *with* adheres to standard English usage and was therefore counted as correct. The relation expressed by the second instance of *with* is not clear. It was decided to include such unclear cases in an "uncertain" category. Chapter IV contains further discussion of instances in the "uncertain" category.

It should be pointed out here that the total number of *instances* of a particular preposition is considered to be all the actual occurrences of that preposition (correct and otherwise), and contexts which required the preposition but where none was used. For example, for the preposition *on*, the total number of instances was calculated as indicated in Table 2. The same procedures for analysis were applied to both the ESL classroom data and the ECG data.

**Characterization of classroom data.** Before presenting the results of the analysis, I would like to outline here an additional characteristic of the classroom data, which appeared to have an important relation to the speech the students produced.
Table 2
Calculation of Total Number of Instances - On

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct use</td>
<td>93</td>
</tr>
<tr>
<td>Incorrect use - Substitution</td>
<td>23</td>
</tr>
<tr>
<td>Overuse</td>
<td>1</td>
</tr>
<tr>
<td>Other incorrect use</td>
<td>8</td>
</tr>
<tr>
<td>Omission</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Uncertain&quot;</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Instances</strong></td>
<td><strong>131</strong></td>
</tr>
</tbody>
</table>

A preliminary examination of the classroom transcripts revealed that utterances produced by the students derived from fairly specific L₂ practice conditions. It was therefore decided to include in the analysis descriptive information about the conditions under which the utterances that contained a preposition (or required one) were produced. Categories of practice conditions are presented in Figure 1, and some findings relative to these practice conditions are presented in Chapter III.
Figure 1

Categories of Classroom Practice Conditions

(1) Student reads aloud from published materials (verbatim). (e.g., Student reads a paragraph from Hearts and Hands, a story in Lado, Book 4, p. 23.)

(2) Student reads aloud a prepared written response. (e.g., Student reads a response he has prepared as homework, usually a set of questions following a story in Lado, and most often multiple choice/fill-in-the-blank.)

(3) Recitation of student-prepared material. (e.g., Two students recite by memory a dialogue prepared and rehearsed beforehand.)

(4) Repetition of all or part of a preceding teacher utterance. (e.g., Teacher: Now. What tense do we use with now? Stéphane. Student: With now, present continuous.

(5) Independent utterance - response to teacher-set task. (e.g., Teacher, inquiring about another way of expressing the future tense besides using will: If I don't want to say, I will do it. Student: I'm going to do it.)

(6) Independent utterance - unconnected to teacher-set task. (e.g., Student: It's too long for remember. Student is commenting on the lengthy definitions that the class must
know for an upcoming test.)

(7) Formulas/chunk learning. (e.g., Student: **To be or not to be.** Student is commenting on the classroom discussion of **be**.)
CHAPTER III

RESULTS

This chapter presents the analysis of English preposition use both in the learners' classroom speech and the speech elicited during the oral communication task. It also describes learners' preposition performance at two different stages of ESL instruction (i.e., for groups of learners in grade 6 and grade 10).

Preposition Use in ESL Classroom Speech

The first analysis of preposition use in classroom speech was in terms of overall group accuracy. For each group, grade 6B and grade 10, the total number of correct uses was divided by the total number of instances, including in the total the number of times a preposition was required but was not supplied by the student. The result was an accuracy score expressed as a percentage. For example, if correct uses for a group totaled 700, and there were 1,000 instances of prepositions identified in the transcripts, that group’s accuracy score would be 70%. Table 3 presents the total number of instances of prepositions identified from the classroom data and overall accuracy scores for preposition use by the grade 6B and grade 10 groups.
Table 3

Total Number of Instances of Prepositions and Group Accuracy Scores - ESL Classroom Speech

<table>
<thead>
<tr>
<th>Grade</th>
<th>6B (n = 26)</th>
<th>10 (n = 28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of instances</td>
<td>931</td>
<td>1,417</td>
</tr>
<tr>
<td>Total number correct</td>
<td>868</td>
<td>1,255</td>
</tr>
<tr>
<td>Total number errors</td>
<td>38</td>
<td>123</td>
</tr>
<tr>
<td>Uncertain</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Accuracy score</td>
<td>93.23</td>
<td>88.56</td>
</tr>
</tbody>
</table>

Note. Accuracy is expressed as a percentage score.

The next analysis of preposition use in classroom speech was in terms of group accuracy on particular prepositions most frequently used. At least 20 instances of a given preposition were required for it to be considered in this phase of the analysis. From the grade 10 transcripts, 14 prepositions were identified: to, in, of, on, for, with, at, out, up, by, from, down, as, and about (here listed in descending order of frequency). Each instance was analyzed in terms of correct use, error, and uncertain. Group accuracy for each preposition was then computed and expressed as a percentage score. This
analysis was conducted for purposes of verifying that the high overall accuracy score reflected similarly high accuracy for each of the 14 forms and that overall accuracy was not the result of very high scores on just a few of them. Table 4 presents the results of the analysis for the grade 10 group's most frequent prepositions as derived from the classroom data. The range of scores for the items listed in Table 4 is 77.58% to 96.55%. For the five most frequent items, the range is somewhat narrower: 79.11% to 90.15%.

All utterances in the grade 10 classroom speech containing one or more prepositions (or Ø supplied where one was required) were then analyzed in terms of practice conditions (see Figure 1). Table 5 presents partial results of this analysis. Three practice conditions account for 72.68% of all the prepositions produced in the grade 10 group's classroom speech: recitation by memory of student-prepared dialogues; reading from published material, fill-in-the-blank/multiple choice exercises; and, reading verbatim from published material.

A close reading of all the grade 6 classroom transcripts available (i.e., 6A, 6B and 6C) revealed that in their ESL classrooms, the grade 6 students appeared to be practising the target language under conditions that were even more highly controlled than those of the grade 10
Table 4

Group Accuracy Scores for Most Frequent Prepositions - Classroom Speech
Grade 10 (n = 28)

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Accuracy</th>
<th>Instances (^a)</th>
<th>Correct</th>
<th>Errors</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>to</td>
<td>90.50</td>
<td>369</td>
<td>334</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>in</td>
<td>90.34</td>
<td>176</td>
<td>159</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>of</td>
<td>79.11</td>
<td>158</td>
<td>125</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>on</td>
<td>86.41</td>
<td>103</td>
<td>89</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>for</td>
<td>87.63</td>
<td>97</td>
<td>85</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>with</td>
<td>90.91</td>
<td>66</td>
<td>60</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>at</td>
<td>77.58</td>
<td>58</td>
<td>45</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>out</td>
<td>93.02</td>
<td>43</td>
<td>40</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>up</td>
<td>90.47</td>
<td>42</td>
<td>38</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>by</td>
<td>94.73</td>
<td>38</td>
<td>36</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>from</td>
<td>87.09</td>
<td>31</td>
<td>27</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>down</td>
<td>96.55</td>
<td>29</td>
<td>28</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>as</td>
<td>78.57</td>
<td>28</td>
<td>22</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>about</td>
<td>95.65</td>
<td>23</td>
<td>22</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Accuracy is expressed as a percentage score.

\(^a\)Instances of the 14 prepositions listed above together account for 88.99\% of all prepositions identified from the grade 10 classroom transcripts.
Table 5

Number of Instances of Prepositions Attributed to Particular Practice Conditions - Grade 10, Classroom Speech

<table>
<thead>
<tr>
<th>Number of Instances of Prepositions</th>
<th>Practice Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>449</td>
<td>Contained in utterances attributed to practice condition 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>311</td>
<td>Contained in utterances attributed to practice condition 3&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>270</td>
<td>Contained in utterances attributed to practice condition 1&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>1,030</td>
<td>Total number of instances contained in utterances produced under conditions 1, 2 and 3</td>
</tr>
<tr>
<td>1,417</td>
<td>Total number of instances in the grade 10 classroom transcripts</td>
</tr>
</tbody>
</table>

<sup>a</sup> Reading from published material, fill-in-the-blank or multiple choice exercise. Exercises usually focussed on language features other than prepositions.

<sup>b</sup> Recitation by memory of student-prepared dialogues.

<sup>c</sup> Reading verbatim from published material.
students. While the grade 10 students had some opportunity for producing language not entirely controlled by the materials used (e.g., presenting student-prepared dialogues), such opportunities were negligible for the grade 6 students.

Analysis of the grade 6B classroom transcripts, in terms of most frequent prepositions, revealed the following: the forms in, on, of, to, at, from, with and under were practised most often (here listed in descending order of frequency). Instances of these eight items together represented 92.34% of all instances of prepositions identified from the classroom transcripts of the grade 6B group.

To summarize, the findings from the analysis of the grade 6B and grade 10 classroom speech revealed: (1) which forms were practised and how often, (2) high accuracy scores and few errors, and (3) a rather limited set of conditions under which the $L_2$ was practised. As such, results from classroom transcript analysis permit only a general comparison between the two groups of learners in terms of forms practised and accuracy scores attained.

The results indicate that the grade 6B and grade 10 groups are similar in two respects. First, the two groups attained similar overall accuracy scores on
prepositions produced in classroom speech: 93.23% for the grade 6B group and 88.56% for the grade 10 group. Secondly, the analysis shows that seven "frequent" prepositions (viz., in, on, of, to, at, from and with) were common to the classroom speech of both groups. Thus, it would appear that both the grade 6B and grade 10 students were, to a large extent, practising the same prepositions in their ESL classes.

Findings derived from the classroom data were found to be of limited use for the purposes of this investigation. It was reasonable to assume that language produced under conditions less highly controlled than those of the classroom would, upon analysis, yield somewhat different results in terms of learners' performance on prepositions. It was decided, therefore, to examine learners' L2 speech elicited during the oral communication task - the Picture Card Game (PCG).

Preposition Use in L2 Speech - PCG

Tallying procedures for prepositions in the PCG transcripts were the same as those used for the classroom transcripts. Overall scores for the grade 6L group and the grade 10 group were then computed for correct use, errors and uncertain. Table 6 presents the overall scores for each group of students.
Table 6

Total Number of Instances of Prepositions and Group Accuracy Scores - PCG

<table>
<thead>
<tr>
<th>Grade</th>
<th>6L (n = 34)</th>
<th>10 (n = 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of instances</td>
<td>320</td>
<td>485</td>
</tr>
<tr>
<td>Total number correct</td>
<td>206</td>
<td>335</td>
</tr>
<tr>
<td>Total number errors</td>
<td>84</td>
<td>112</td>
</tr>
<tr>
<td>Uncertain</td>
<td>30</td>
<td>38</td>
</tr>
</tbody>
</table>

Accuracy Score 84.37  69.07

Note. Accuracy is expressed as a percentage score.

The particular prepositions subsequently analyzed were those for which at least ten instances had been found in the PCG transcripts. Five prepositions were identified from the grade 6L PCG transcripts: on, in, with, to and of; and ten from the grade 10 PCG transcripts: on, in, with, to, of, at, into, between, out and in front of. Tables 7 and 8 present the group scores attained by grade 6L and grade 10 groups for the particular prepositions listed above.
Table 7

Group Accuracy Scores for Most Frequent Prepositions: PCG - Grade 6L (n = 54)

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Accuracy</th>
<th>Instances</th>
<th>Correct</th>
<th>Errors</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>on</td>
<td>83.15</td>
<td>95</td>
<td>79</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>of</td>
<td>68.75</td>
<td>16</td>
<td>11</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>with</td>
<td>64.81</td>
<td>54</td>
<td>35</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>to</td>
<td>62.50</td>
<td>32</td>
<td>20</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>in</td>
<td>57.57</td>
<td>66</td>
<td>38</td>
<td>27</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Accuracy is expressed as a percentage score.

Instances of the five prepositions listed above together account for 82.18% of all prepositions identified from the grade 6 PCG transcripts.
Table 8

Group Accuracy Scores for Most Frequent Prepositions: PCG - Grade 10 (n = 25)

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Accuracy</th>
<th>Instances(^a)</th>
<th>Correct</th>
<th>Errors</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>between</td>
<td>93.30</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>to</td>
<td>83.78</td>
<td>37</td>
<td>31</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>of</td>
<td>78.57</td>
<td>42</td>
<td>33</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>with</td>
<td>75.00</td>
<td>40</td>
<td>30</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>in front</td>
<td>75.00</td>
<td>16</td>
<td>12</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on</td>
<td>70.99</td>
<td>131</td>
<td>93</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>in</td>
<td>59.77</td>
<td>87</td>
<td>52</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>at</td>
<td>54.54</td>
<td>22</td>
<td>12</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>into</td>
<td>40.00</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>out</td>
<td>12.50</td>
<td>16</td>
<td>2</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Accuracy is expressed as a percentage score.

\(^a\)Instances of the 10 prepositions listed above together account for 85.36% of all prepositions identified from the grade 10 PCG transcripts.
The findings from the analysis of the PCG data indicate several similarities between the grade 6L group and the grade 10 group, in terms of most frequent prepositions and overall accuracy scores. For both groups, *on*, *in*, *with*, *to* and *of* were the five most frequent prepositions in their PCG speech. Also, the two groups attained similar overall accuracy scores for prepositions in the PCG: 66.56% accuracy for the grade 6L group and 69.07% accuracy for the grade 10 group. In addition, for both groups, the PCG accuracy scores were considerably lower than those obtained from the classroom data. More specifically, the difference between the two scores is 26.5% for the grade 6L group, and 19.5% for the grade 10 group.

A comparison of the groups' PCG results indicates several differences. First, the grade 10 group produced five prepositions (or contexts requiring these prepositions) which did not occur in the grade 6L speech, but there were no prepositions in the 6L speech which did not also occur in the grade 10 speech. (see Tables 7 and 8). Secondly, for the five most frequently occurring prepositions used by the groups, the grade 10 group had higher accuracy on four of the forms, and the 6L group had higher accuracy on one of the forms (see Table 9).
Table 9
A Comparison of Grade 6L and Grade 10 Group Accuracy for Most Frequent Prepositions - PCG

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Grade 6L</th>
<th>Grade 10</th>
<th>(d^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>on</td>
<td>83.15</td>
<td>70.99</td>
<td>(12.16)</td>
</tr>
<tr>
<td>of</td>
<td>68.75</td>
<td>78.57</td>
<td>(9.82)</td>
</tr>
<tr>
<td>with</td>
<td>64.81</td>
<td>75.00</td>
<td>(10.19)</td>
</tr>
<tr>
<td>to</td>
<td>62.50</td>
<td>83.78</td>
<td>(21.28)</td>
</tr>
<tr>
<td>in</td>
<td>57.57</td>
<td>59.77</td>
<td>(2.20)</td>
</tr>
</tbody>
</table>

Note. Accuracy is expressed as a percentage score.

\(a\)Numbers in parentheses represent the difference between the group scores for each preposition, expressed in percentage points.

Analysis of preposition errors - PCG. Preposition errors identified from the PCG data were further analyzed as to type (see Chapter II). Tables 10 and 11 show the number and type of preposition errors for the grade 6L group and the grade 10 group.

For both the grade 6L and the grade 10 groups, the most common type of error in their PCG speech was substitution. Substitution errors occurred most often with on
Table 10

Number and Type of Preposition Errors - PCG, Grade 6L (n = 34)

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Total Instances</th>
<th>Substitution</th>
<th>Overuse</th>
<th>Omission</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) in</td>
<td>66</td>
<td>17</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>(0) on</td>
<td>95</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) to</td>
<td>32</td>
<td>3</td>
<td>7</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>(15) with</td>
<td>54</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(0) of</td>
<td>16</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Figures in parentheses indicate number of uncertain.

Prepositions are listed in descending order of accuracy for the group.
Table 11

Number and Type of Preposition Errors - PCG, Grade 10 (n = 25)

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Total Instances</th>
<th>Substitution</th>
<th>Overuse</th>
<th>Omission</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) on</td>
<td>131</td>
<td>23</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>(6) in</td>
<td>87</td>
<td>21</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>(1) out</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>(3) at</td>
<td>22</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>(0) into</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>(3) of</td>
<td>42</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>(2) to</td>
<td>37</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>(2) in front of</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>(9) with</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>(0) between</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Figures in parentheses indicate number of uncertain.

aPrepositions are listed in descending order of accuracy for the group.
and in. That is, the locative preposition on was incorrectly produced in a context requiring a different locative (viz., in, at or into), and the locative in was produced in a context requiring on, to or above. These on/in substitution errors account for 46.77% of all preposition errors in the grade 6L PCG data and 42.71% of all the errors in the grade 10 PCG data. Figure 2 presents examples of grade 6L and grade 10 utterances containing on/in substitution errors.

For the grade 6L students, the next most common error types were other errors occurring with it (12.69% of all 6L errors), and overuse errors with to (11.11% of all 6L errors).

In the grade 10 PCG data, the next most common error type, after on/in substitution, was omission errors occurring with out, at and into. Instances of omission of these three forms together accounted for 22.74% of all the grade 10 preposition errors.

These results will be discussed in the next chapter.
Figure 2

Examples of on/in Substitution Errors - PCG Speech

On Substitution Errors - Grade 6L

Example A: "on" for "in" - Picture 5d

Interviewer
How many people are in your picture?

Student
Two. One on the car. uh_, one on the truck.

Example B: "on" for "in" - Picture 6c

Interviewer
Student
They have a books on uh_, his hands.

Example C: "on" for "in" - Picture 1d

Interviewer
Are the cookies on a plate?

Student
On a box.

In Substitution Errors - Grade 6L

Example A: "in" for "on" - Picture 3c

Interviewer

Student
It's a cake in the plate. And the plate in the table.

Example B: "in" for "to" - Picture 6a

Interviewer

Student
The children are going in school.

Example C: "in" for "above" - Picture 4c

Interviewer

Student
The box near the boy, in the table.
**On Substitution Errors - Grade 10**

**Example A:** "on" for "in" - Picture 5d

**Interviewer**

**Student**

One person on the car, one person on the truck.

---

**Example B:** "on" for "at" - Picture 3b

**Interviewer**

**Student**

They are on a party.

---

**Example C:** "on" for "in" - Picture 4c

**Interviewer**

**Student**

He takes uh, the box on his hand.

---

**In Substitution Errors - Grade 10**

**Example A:** "in" for "on" - Picture 3d

**Interviewer**

**Student**

In the table, it's a cake.

---

**Example B:** "in" for "to" - Picture 6a

**Interviewer**

**Student**

They go in uh, school.

---

**Example C:** "in" for "into" - Picture 5d

**Interviewer**

**Student**

A truck is, bumping in the side, of the car.
CHAPTER IV

DISCUSSION

Classroom Results

Looking only at the classroom accuracy scores, one might conclude that the L₂ learners in this study experience little difficulty with the fairly wide range of prepositions they use in their ESL classroom speech. Indeed, both the grade 6B and the grade 10 groups, with only two and five years of ESL instruction (at the beginning of the observation period), and little exposure to English outside school, are producing what might appear to be astonishing results: 88% and 93% accuracy on preposition use. This finding seems to contradict both the impressions of experienced ESL teachers and the indications of previous L₂ research findings – namely, that English prepositions are difficult for L₂ learners and acquisition of English prepositions with control over all restrictions on their use is a process that extends over a considerable period of time. Even for the L₁ learner, the process continues at least into the primary school years.
However, in describing performance on English prepositions by the particular L2 learners in this study, one cannot ignore the specific practice conditions prevailing in the ESL classroom (see Figure 1). The majority of the grade 10 student utterances containing English prepositions derived wholly or partially from available published materials (see Table 5).

For the grade 6B group, 12 of the 15 classroom sessions recorded were lessons characterized by frequent practice of one or two particular preposition forms. In many cases, the teacher cue contained the appropriate preposition. Otherwise, the cue appeared in the learners' textbook.

For the grade 10 group, one of the 11 classroom sessions recorded was a lesson on two-word verbs from Essential Idioms in English (Dixson, 1971).

What this means is that the grade 6B learners were, for a great part of the observation period, engaged in practising particular prepositions by incorporating the teacher's verbal cue into their utterances or producing an utterance from linguistic or pictorial cues in the text. The grade 10 students were usually engaged in reading from the text, doing multiple choice/fill-in-the-blank exercises from the text, or reciting prepared
dialogues. For the most part, the focus of the grade 10 lessons was an English language feature other than prepositions and as such, utterances produced from the printed materials already contained the appropriate preposition.

In a sense, the printed ESL classroom materials and the language contained therein, along with teacher-provided verbal cues, controlled the language items and structures produced by the learners much of the time. Under the circumstances, the question facing the researcher was, to what extent does the analysis of such language data reflect a true picture of learners’ ability to use English prepositions? There was no clear answer to the question. It was thought that a partial answer could be obtained by examining the speech the learners produced while playing the PCG, where their speech was not a mirror reflection of the language used by the teacher or in the materials, and where the stimuli for their speech were not primarily linguistic.

**PCG Results**

Four prepositions used frequently by both groups of learners during the PCG were also the prepositions most often practised in the ESL classroom; namely, on, in, to and of.
Results obtained from the PCG data indicate that, for both groups of learners, PCG overall accuracy scores for preposition use are considerably lower than the scores derived from the classroom data.

Unlike the ESL classroom, where prepositions were available, the PCG did not make prepositions available to the learner in any models of written language and only rarely were prepositions recently present in interviewer speech (e.g., I: Are the drivers inside the cars or outside? S: Outside, at upside). Thus, while engaged in describing the picture they had chosen, learners had to rely on the visual cues in the picture and whatever they could remember from their L2 learning experience to aid them in speaking the target language.

What the classroom conditions required from the learners was, for the most part, a reading or "reproduction" of the target language and some production with no immediate model whenever the exercise was fill-in-the-blank or multiple choice. What the PCG required from the learners was oral production of the L2 in the absence of printed texts, and, for the most part, oral models.

Taking into account this difference in conditions, it is not surprising that the group results from the two types of data differ in terms of performance on prepositions: high accuracy in the classroom, considerably
lower accuracy in the PCG.

In an attempt to verify the assumption that the
differences between the grade 6B classroom performance
and the 6L PCG performance were not due to the differences
in the composition of the two groups (see Chapter I),
an analysis of the 6L PCG data was performed for each of
the sub-groups (i.e., 6B and 6A+C) in terms of most
frequent prepositions and overall accuracy scores. The
results of this analysis support our previous assumption
that the two grade 6 groups in this study, 6B and 6L, are
indeed comparable (see Table 12).

Table 12

Overall Accuracy on Prepositions* in the PCG:
Group 6L and Sub-Groups 6B and 6A+C

<table>
<thead>
<tr>
<th>Group</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>6L (n = 34)</td>
<td>64.37</td>
</tr>
<tr>
<td>6B (n = 11)</td>
<td>61.32</td>
</tr>
<tr>
<td>6A+C (n = 23)</td>
<td>65.58</td>
</tr>
</tbody>
</table>

Note. Accuracy expressed as a percentage score.

*Most frequent prepositions for 6L and both sub-
groups: on, in, with, to and of.
Although PCG accuracy scores are lower than the classroom scores, PCG accuracy is nevertheless well over 50% for both the grade 6L and grade 10 learners. It cannot be by mere chance that the two groups used prepositions correctly in 64.37% and 69.07% of the instances. While the learners are still experiencing some difficulty, as is suggested by the PCG results, they are, nevertheless, showing signs of reasonable proficiency in their use of some English prepositions.

An interesting finding from the PCG analysis is the similarity in overall accuracy scores for the grade 6L and grade 10 groups. At first glance, similar accuracy scores might be suggestive of a comparable level of proficiency in using English prepositions on the part of both groups of learners. If so, how would one account for the seeming lack of progress by the grade 10 learners, who have had 800 hours of ESL instruction, compared with only 200 hours for the grade 6L learners?

A closer look at the results shows that, despite the similarity of overall accuracy scores, performance does differ between the groups in a number of ways.

First of all, the grade 10 accuracy scores for three prepositions (of, with and to) were considerably higher than grade 6L scores on those particular forms, although
the grade 6L accuracy for on is higher than that of grade 10 (see Table 9).

Secondly, the grade 10 learners produced a wider range of forms (or contexts for their use) while participating in the PCG. Five forms common to the grade 10 PCG speech but found only rarely, or not at all in the 6L PCG speech were: at, into, between, out and in front of (see Tables 8 and 9). All of these forms had been taught in the grade 6 ESL classroom some time prior to the administration of the PCG. Furthermore, at and out, as presented in the grade 6 ESL classroom materials appear in linguistic environments similar to those found in the grade 10 PCG speech (i.e., look at, and blow out the candles. See Look Listen and Learn, Book II, Lessons 8, 12, 13, 14, 25 and 26). One can only venture a guess as to why these forms are not attempted at all, or only rarely by the grade 6L learners during the PCG.

Finally, in terms of average number of prepositions used per learner, tabulations based on the PCG data show that the grade 10 learners used almost twice as many prepositions as the grade 6L learners. Calculated on the basis of the prepositions common to the PCG speech of both groups, the grade 10 learners average 13.48 instances each and the grade 6L learners 7.7 each. The prepositions
on, in, of and to were 1.5 to 3.5 times more frequent in grade 10 PCG speech than in the grade 6L PCG speech.

It appears evident that a description of performance based solely on accuracy scores disguises some important aspects of preposition use by these learners. Other aspects of use, such as the range of forms attempted and the quantity of items produced need to be taken into account in order to more fully describe learners' use of English prepositions.

**Errors in Preposition Use - PCG**

"On"/"in" substitution errors. On/in substitution errors in learners' PCG speech occurred most often as substitutions of on for in and in for on. Given the pictorial content being described and the linguistic environment in which in and on were used, such errors cannot be attributed to L1 transfer. In fact, had the learners employed such a strategy (i.e., L1 transfer) in using these two locatives, accuracy would have been considerably higher (e.g., directly translating sur la table and dans la boîte, would have yielded the correct forms, on the table and in the box, instead of the incorrect forms produced by some learners, in the table, and on the box). In the contexts described here, on and
in are semantically quite simple (see Clark, 1973). Phonologically, on and in are quite different in terms of vowel quality. Assuming that these learners understand the meaning of on (support), and in (containment), perhaps there is enough phonological similarity between the two words (especially under conditions of reduced stress), that learners focusing on communication rather than form, produce the wrong locative. It would be useful to have a comprehension task performed by these learners. While it is no longer possible to obtain such data from these learners, samples of learners' written English were collected as part of the Lightbown and Barkman study. An analysis of these written samples at some future date would be useful. In the absence of comprehension data and any analysis of the written data, any explanation put forth for on/in substitution errors must remain completely speculative.

"To" overuse. Grade 6 overuse errors with to were relatively infrequent (seven errors), and occurred either in a context requiring a possessive (e.g., The dress to the girl for The girl's dress), or in sentences such as They go to the house for They're going home (see picture 6c).
In the first case, L₁ transfer offers a possible explanation for the incorrect use of to (i.e., *La robe à la fille* = *The dress to the girl*).

In the case of errors such as *go to the house* for *going home*, there are several possible explanations. The first possibility is L₁ transfer; French speakers often use *Ils vont à la maison* rather than *Ils vont chez eux* for *They're going home*. Or, it may be that the appropriate lexical item, *home*, has not yet been acquired by these grade 6 learners. Going to + noun phrase has been practised often in their ESL classroom, and *house* is a fairly common noun. By combining a familiar structure and lexical item, the learner produces an utterance that is grammatically correct but contextually inappropriate.

"Out"/"at"/"into" omission errors. Grade 10 omission errors with *out*, *at* and *into* are relatively few in number and occur, for the most part, in specific linguistic environments. Omission of *out* occurs in speech describing pictures 3a or 3b (see Appendix 1), where the student utterance is made up of the verb *blow + the candles*. Omission of *at*, in almost all cases, occurred in utterances where the main verb was *look* (+ noun phrase). Such errors with *out* and *at* may be due to L₁ transfer. While English
requires a particle in the environments look (at) the book and blow (out) the candles, such is not the case in French: regarder le livre and souffler les bougies.

Omission of into occurs in speech describing the pictures in set 5, and where the main verb in the student utterance was bump (+ noun phrase), or crash (+ noun phrase). Accounting for learners' omissions of into is problematic. It would be useful to have French data from these learners in order to see what verb the learners employ to describe the accident scene - cogner, frapper, foncer, s'écraser or something else.

Uncertain use of "with". In addition to accuracy and types of errors, there is one other aspect of the PCG results that merits attention: the uncertain instances of with. A relatively high proportion of instances of this item were designated uncertain (rather than correct or error) because it was not always clear from the PCG data what semantic relation was intended when a learner used with.

In the vast majority of correct instances of with identified from the data, the preposition expressed a "having" relation. For example, consider the following stretch of speech: There's a school with a yellow and
red clock. With three boys running to school. In the first utterance, the relation expressed by with may be rephrased as The school has a clock, or noun₁ has noun₂. Assuming that the second utterance expresses a similar relation, the first noun is missing from the utterance; that is, (?) has noun₂. Normally, where sentences containing with ("having" relation) conform to standard English usage, Noun₁ is expected to immediately precede the preposition. However, in conversation, one is usually not as careful in attending to certain standard language practices as one may be when writing the language. What may happen, as a result of this "non-attending", is a separation of Noun₁ from the phrase, with Noun₂, by an intervening stretch of speech. The question then arises, how does the listener, or in this case the researcher, locate and identify Noun₁? A close reading of English PCG data from adolescent native speakers revealed a number of utterances of the type (?) with noun₂; (e.g., It's a school. A clock on it that says eight thirty, I think. Seven or eight thirty, with five kids running into the school). Perhaps the Noun₁ preceding the with is to be considered: (It's a picture) with Noun₂. Or perhaps with is not intended to express a "having" relation. It may be that such instances of with are being used as "fillers" in conversation, much
the same way as and is used for that purpose by some native speakers. More research is needed in the area of native speaker discourse in order to better understand how with is being used. It is evident from data examined in this study that interpreting uses of with can be problematic in both native and non-native speaker data, and that evaluation of the item in terms of correctness is not always possible.
CHAPTER V

SUMMARY AND CONCLUSIONS

This study was undertaken to examine L₂ learners' use of English prepositions in terms of the range of forms used, accuracy and types of errors. The purpose was two-fold: (1) to describe preposition use across two groups of learners at different stages of ESL instruction; and, (2) to describe learners' use of prepositions as revealed by L₂ speech produced under different sets of conditions. Data were obtained by recording a sampling of ESL classroom sessions throughout a school year, and also from an oral communication task in which learners participated during the latter months of the same school year.

Results from the ESL classroom data analysis show that, for the most part, the grade 6 and the grade 10 learners were practising the same preposition forms. Also, many of the preposition forms most frequently practised in the ESL classrooms are the preposition forms most frequently used in English (Stagesberg, 1965; Carroll, Davies & Richman, 1971).
The two types of oral data examined for this study did not contain the full range of English preposition forms, and some of the forms appeared infrequently. Therefore, any conclusions offered here can only be tentative.

A comparison of the ESL classroom and PCG accuracy scores suggests that frequent practice of correct preposition forms under highly controlled conditions does not necessarily lead to equally correct use of the same forms when the L2 learners are engaged in a freer, more communicative language activity. A case in point is on/in. These forms were taught early and practised often. Accuracy was high in the classroom, but PCG results indicate that these two locatives are still problematic for the learners. Although not native-like in their use of English prepositions during the oral communication task, learners are, nevertheless, reasonably proficient in their use of some English prepositions.

Similar PCG overall accuracy scores would seem to suggest that L2 learners become fairly proficient in using some English prepositions in the early stages of L2 learning, and that accuracy on that class of forms then increases relatively little and levels off somewhat.
As findings from the grade 10 PCG data indicate, though overall accuracy remains almost static, there is progress in other aspects of preposition use: prepositions appear more frequently in speech as L2 learners generally talk more, and they attempt to use a wider range of preposition forms. However, keeping in mind that this study was cross-sectional, any statements concerning the developmental aspects of L2 learners' use of English prepositions need to be substantiated with longitudinal data. In the absence of more kinds of data, any pedagogical suggestions concerning the teaching of English prepositions to L2 learners would be premature.

Implications for Future Research

In this study, English prepositions, as well as verb particles having a similar form, were included together in all phases of analysis (see Chapter II). It was pointed out earlier in this study how, from a grammarian’s point of view, delimiting the class of forms which are English prepositions remains problematic. Preliminary findings from an ongoing L2 study ("Second Language Learning in Adults", 1979) suggest that it is difficult to learn a range of English phrasal verbs until the semantics of the particles themselves (e.g., of, for, up, etc.) has been mastered. It is evident that
for the purposes of L₂ research, some means of distinguishing between English prepositions and verb particles needs to be devised; and any research reporting on L₂ learners' use of prepositions should specify what items are counted (or not counted) from the data being examined.

The next point I wish to make concerns the nature of some types of L₂ data and the conditions under which the target language is produced by the learners. A researcher intending to use L₂ classroom interaction data is not in control of a testing instrument chosen or designed for purposes of his study. Rather, he is an observer, with no control over such things as the language features produced by the learners, the frequency of practice of particular items, or the conditions of practice. Thus, the usefulness of classroom data for L₂ research may vary, depending upon the classroom conditions under which language was produced, and the particular interests of the investigator.

As has been indicated by the findings of this study, L₂ speech produced by learners in their ESL classroom may not necessarily reflect the learners' real ability to use the target language. In L₂ classrooms such as the ones investigated in this study, where students' use of the L₂
is highly controlled by the teacher and the materials, any inferences concerning learners' ability to use the L₂ must be substantiated with additional data. Some of the earlier L₂ studies investigating learners' use of English prepositions have employed such data collection instruments as multiple choice tests, cloze tests or grammaticality judgement tests (e.g., Oller & Inal, 1971; Khampong, 1974). The researcher controls all of the language contained in such tests, except for the particular feature under investigation. One can see how analysis of the data obtained by these means is fairly straightforward, because the range of possible responses is relatively restricted. In data collection methods such as the oral communication task used in this study, where it is the L₂ learner who produces virtually all of the language data being examined, semantic and syntactic analysis of the language produced can be difficult, and in some instances not possible. In order for the results of analysis to be interpretable when this kind of data is used, the methods of analysis will have to be much more precisely specified than they have been in the past. This is so because the range of language produced during tasks such as the PCG is less restricted than the range obtained using other instruments.
When using instruments such as the PCG, several additional procedures can be included during the data collection period that should prove useful in subsequent analysis of the L₂ data: (1) the L₂ learners perform the same communication task in their L₁, as well as in the target language. L₁ data provides plausible evidence for determining if L₂ errors are due to transfer; and, (2) native speakers of English perform the same communication task as the L₂ learners under investigation. Native speaker data can be an aid in evaluating what constitutes appropriate use - syntactically and semantically - especially where linguistic descriptions are incomplete (for native speaker/ESL learner comparison of other language features, see Lightbown, Moro & Malcolm, 1981).

In conclusion, I would like to suggest that detailed studies of particular grammatical structures using a variety of data types can be a valuable tool for the field of second language research. Focus on a particular set of structures produced by L₂ learners under varied conditions not only provides a clearer view of their abilities than analysis of a single data type, but also reveals problems of linguistic description and second language performance analysis that might otherwise have remained covert. The realization that problems exist is, of course, the first step toward their solution.
REFERENCES


Appendix 1

Pictures from the Picture Card Game