This thesis presents the results of a field study of code-switching in K-3 level classrooms of an experimental Spanish-English bilingual education project in Los Angeles. The goal of the project, based on a pluralistic model of bilingual education, was the maintenance of Spanish by means of continued language-development in both the students' native and second languages. The thesis shows that the means of implementation contradict the project's goals. Data was collected on code-switching in 12 different setting-participant combinations during language-development lessons. A quantitative measure related code-switching by teachers and students to specific setting-participant combinations. An analysis of the functions of teacher code-switching indicates that it is a communicative strategy. The study concludes that: (1) English is more intrusive in the classroom than Spanish; (2) the contrast in the amount of code-switching by teachers may be based on their expectations of students to communicate in the target language; and (3) the contrast between the patterns of teacher code-switching during the language lessons may be signaling to students that English functions more efficiently than Spanish for "important" messages in the classroom. Demotion of Spanish may be an attitude-motivation factor in both the maintenance of Spanish for native speakers and the acquisition of Spanish for native speakers of English. (Author/CLK)
CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

CODE-SWITCHING IN BILINGUAL CLASSROOMS

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts in

Anthropology

by

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May, 1975
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May, 1975
"There is one thing stronger than all the armies in the world, and that is an idea whose time has come."

Victor Hugo

To Mom, Jack, Pamela, and Paula
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<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEDICATION .................................................. iii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS ............................................... iv</td>
</tr>
<tr>
<td>LIST OF TABLES ................................................ vi</td>
</tr>
<tr>
<td>ABSTRACT ......................................................... vii</td>
</tr>
<tr>
<td>INTRODUCTION ................................................... 1</td>
</tr>
<tr>
<td>CHAPTER</td>
</tr>
<tr>
<td>I THE ETHNOGRAPHY OF COMMUNICATION MODEL ................. 11</td>
</tr>
<tr>
<td>II MICRO-ETHNOGRAPHY OF THE SPEECH COMMUNITY ............ 19</td>
</tr>
<tr>
<td>III DATA COLLECTION ........................................... 31</td>
</tr>
<tr>
<td>IV ANALYSIS OF CODE-SWITCHING DATA ....................... 42</td>
</tr>
<tr>
<td>V CONCLUSIONS .................................................. 56</td>
</tr>
<tr>
<td>BIBLIOGRAPHY .................................................... 59</td>
</tr>
<tr>
<td>APPENDICES</td>
</tr>
<tr>
<td>A SAMPLE DATA COLLECTION CARD ............................... 63</td>
</tr>
<tr>
<td>B SAMPLE ASSOCIATED DATA FORM ............................. 64</td>
</tr>
<tr>
<td>C INFORMAL INTERVIEW WITH TWO STUDENTS ................. 66</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Percentage of Native Spanish and Native English Speakers</td>
</tr>
<tr>
<td>2</td>
<td>TS by Teacher and Class Setting</td>
</tr>
<tr>
<td>3</td>
<td>SS by Teacher and Class Setting</td>
</tr>
<tr>
<td>4</td>
<td>SS in Response to TS by Teacher and Class Setting</td>
</tr>
<tr>
<td>5</td>
<td>TS in Response to SS by Teacher and Class Setting</td>
</tr>
</tbody>
</table>
ABSTRACT

CODE-SWITCHING IN BILINGUAL CLASSROOMS

by

Jean McCabe Phillips

Master of Arts in Anthropology

May, 1975

This thesis presents the results of a field study of code-switching in kindergarten, first, second, and third grade level classrooms of an experimental Spanish-English bilingual education project in Los Angeles.

The research in this present study is addressed to the current problem of a disparity between the goals and means of bilingual education programs. Though many programs state that the maintenance of the ethnic language is a goal, in most cases the structure of the program contradicts this goal (Kjolseth 1973:16).

The stated goal of the bilingual education project of this study was the maintenance of Spanish by means of continued language-development in both the students' native and second languages. In terms of goals, this project was based on a pluralistic model of bilingual education (Kjolseth 1973:5). I determined from a sociolinguistic perspective that the means of implementation of the program contradicted this goal.
The main research question was, "Who speaks what language to whom and when?" (Fishman 1965). Using the Ethnography of Communication model (Hymes 1972) as the theoretical frame of reference, I collected data on code-switching in twelve different setting-participant combinations during the language-development lessons.

A quantitative measure related code-switching by teachers and students to specific setting-participant combinations. An analysis of the functions of the teacher code-switches indicates that code-switching is a communicative strategy.

This study concludes that English is more intrusive in the bilingual classroom than Spanish; that the contrast in the amount of code-switching by teachers may be based on their expectations of the students to communicate in the target language; and that the contrast between the patterns of teacher code-switching during the language lessons may be signaling to students that English functions more efficiently than Spanish for "important" messages in the classroom. This demotion of Spanish may be an attitude-motivation factor (Gardner and Lambert 1972, Pride 1971) in both the maintenance of Spanish for native speakers and the acquisition of Spanish for English native speakers.

This study suggests that implementers of bilingual education projects which aim to maintain the ethnic language monitor the functional distribution of both the ethnic and the non-ethnic languages in the classrooms.
INTRODUCTION

Numerous experimental bilingual education projects have received funding from various federal and state legislative Acts in the last decade. The 1972-1973 Guide To Title VII ESEA Bilingual Bicultural Projects In The United States contains descriptive abstracts of 216 projects conducted in 29 states, the Mariana Islands, Puerto Rico, the Virgin Islands, and Guam. These programs received 35 million dollars. The Bilingual Education Act, Title VII, authorized 115 million dollars for approved programs for the year 1973-74 (Trueba 1974:10). The time for bilingual education in the United States has come.

In addition to Title VII Bilingual Education Act of 1968, Title I Programs for the Disadvantaged, Title IV Indian Education Act, and the Johnson-O'Malley bill provide funds for bilingual education programs in the United States and its possessions. Some state legislatures have followed the federal pattern. For example, the California legislature passed a Bilingual Education Act in 1972 which established a two year program funded in the amount of 5 million dollars. This program was extended for the 1974-75 fiscal year with an appropriation of 15,800,000 dollars.
At the urban level, these funded programs are being implemented and administered by the local public school systems. For example, the Los Angeles City Unified School District has curriculum consultants and project directors for its Title VII and Title I programs.

What is bilingual education? How can it be defined? Approved bilingual education projects funded by the federal government must conform to regulations and program guides set forth by the U.S. Office of Education. This office defines bilingual education as "the use of two languages, one of which is English, as mediums of instruction...for the same student population, in a well-organized program which encompasses part or all of the curriculum, plus study of the history and culture associated with a student's mother tongue" (Gaarder 1970:164).

Litsinger (1973:147) cites six essential components of a sound bilingual education program from the Texas Education Agency's manual for implementing bilingual education programs (1969). They are:

1. Utilization of the native language in the educational process to teach basic concepts and skills necessary for future learning
2. Continued language-development in the native language
3. The development of subject matter in the native language
The development of subject matter in the second language

The development of a positive self-image and cultural identity

Continued language-development in the second language

Given the broad definition of a bilingual education program by the U.S. Office of Education and the essential components as set forth by the Texas Education Agency, one can see that much variability is still possible in the aims, structures, policies, and outcomes of educational programs currently operating under the cover term of "bilingual education".

Kjolseth (1973) views the concept of bilingual education from a sociolinguistic perspective. This view places all possible structures of bilingual education programs on a continuum. One extreme of this continuum is the Assimilation Model which results in a language shift for the ethnic student. The other extreme of this continuum is the Pluralistic Model which results in language maintenance for the ethnic student. The category of Assimilation Model contains all bilingual education programs.

In using the terms "ethnic" and "non-ethnic" to identify students and languages, I am employing the current working vocabulary of the authors cited in this paper. See Kjolseth (1973) in particular. I have no intention to imply that all students and all languages are not linked with some ethnic group.
programs on the continuum which use the ethnic language as a medium of instruction, but only as a bridge to English. This bridge is to be crossed as rapidly as possible and only minimal skills in the ethnic language are taught. The goal is to transfer the reading and writing skills to English after a maximum of three years (13). The category of Pluralistic Model contains all bilingual education programs on the continuum which are "two way", with both ethnic and non-ethnic students learning in their own and the others' language. The medium of instruction is dual. The goal of these programs which last a minimum of nine years is the maintenance of both languages (8-9).

The implication of the Assimilation Model is that bilingual education is for the "linguistically disadvantaged" child whose mother tongue is not English. The implication of the Pluralistic Model is that bilingualism is a linguistic advantage and all children in the bilingual community are in equal need and should have the opportunity to acquire a second language.

According to a report by Gaarder (1970) on the first seventy-six bilingual education projects funded by the Office of Education under the Bilingual Education Act, the majority of the projects are structured on the Assimilation Model. Only six projects aim eventually to provide bilingual schooling at all grade levels, i.e., from the first through the twelfth (171).
Kjolseth (1973:16) also states that the great majority (over 80%) of bilingual programs approximate the Assimilation Model. The structures of the programs are in contradiction to the statements of goals.

The research in this present study is addressed to the current problem of a disparity between the goals and means of bilingual education programs. Though many programs aim for equal emphasis on both languages, "it is evident in most cases that, whether consciously or unconsciously, the emphasis is very far from equal" (Gaarder 1970:164).

The field study for the research reported in this thesis was done on one bilingual education program representing one point on the continuum of bilingual education structures. One of its stated goals is the maintenance of Spanish: therefore the target program is in the category of Pluralistic Model in terms of goals. I attempted to determine from a sociolinguistic perspective if anything in the means of the program contradicts this goal.

I collected data on speech usage in its specific sociocultural context by using the theoretical model formulated by Dell Hymes, an anthropologist and a linguist. This sociolinguistic model commonly known as "The Ethnography of Communication" (Hymes 1972) will be described in Chapter I.

The specific research domain of bilingual education from a sociolinguistic perspective is one that is currently
receiving much interest from psychologists (Lambert and Tucker 1972), educators (Cazden, et al., 1972), sociologists (Kjolseth 1973), and anthropological linguists (Spolsky 1972, Gumperz and Hernandez-Chavez 1972, and Hymes 1970). Hymes says, "Bilingual education is a sociolinguistic subject par excellence" (1970:70).

Lambert and Tucker's (1972) research indicates that children are capable of succeeding in an educational program with a curriculum in a foreign language. Generalization of the results of the Lambert and Tucker study is limited by the specific sociocultural variables of the subjects. They were middle class native English (the dominant language) speakers learning French (the minority language). Lambert has expressed the limitations to his findings:

The contrast, let's say, between Spanish American children who are coming into a school system in the United States and learning through English is not a valid parallel. For the minority group in the United States, giving up the home language and entering an American school is like kissing his home language goodbye. In the case we are dealing with, however, English is clearly the most powerful language, so much so that these parents can be sure to have English skilled children who can afford to learn some French. The contrast is a strong one (Lambert, Just, and Segalowitz 1970:276).
Lambert's position on the need to place research in bilingual education in its sociocultural context is reinforced in *Attitudes and Motivation in Second-Language Learning* (Gardner and Lambert 1972:45). Some of the research data were collected in Louisiana, Maine, and Connecticut in French-English bilingual education settings. The findings show a high level of achievement in language learning associated with four separate independent variables. These variables are:

1. Motivation and desire to learn the target language when supported by the student's family
2. The student's attitude and feelings toward the representatives of the group whose language is being studied
3. Intelligence
4. Language learning aptitude (36-38).

Lambert and Gardner argue that the two independent factors (attitudinal-motivational and aptitude-intelligence) are the two major sources of influence in learning a second language. They further state that one cannot predict the achievement level of a student in language learning unless one has information about both the attitudinal-motivational and the intelligence-aptitude characteristics of the student (55).

Lambert and Gardner concluded that each community in the field study had its own distinctive and unique pattern
of sociocultural variables operating on the bilingual education program (54).

The sociocultural settings of bilingual education programs must be understood before the academic achievements of the students involved in them can be compared. A micro-ethnographic study of each bilingual education program provides the context for the language learning process.

One of the primary objectives of this study is to document the structure, goals, means, and ethnographic setting of one bilingual education pilot program in an elementary school in the Los Angeles City Unified School District. The micro-ethnography of this school situation is presented in Chapter II.

During this first year of the pilot program, it was structured to focus on two of the six components set forth by the Texas Education Agency's manual (1969). These were (1) continued language-development in the native language and (2) continued language-development in the second language. This field study focused on code-switching behavior in teacher-student interactions during the Spanish and English language-development class periods.

Scholars have used the code-switching paradigm in dealing with bilingual communication (Gumperz 1970:130). The assumption is that in general there is a correlation between language usage and setting. This sociolinguistic approach to the study of bilingualism and the rationale for counting occurrences of code-switching are stated by
Having discovered that speakers alternate between what, from a linguistic point of view, constitute grammatically distinct systems, investigators then proceed to study where and under what conditions alternants are employed, either through surveys in which speakers are asked to report their own language usage (Fishman 1965) or by counting the occurrence of relevant forms in samples of elicited speech. The assumption is that the presence or absence of particular linguistic alternates directly reflects significant information about such matters as group membership, values, relative prestige, power relationships, etc.

Gumperz and Hernandez-Chavez (86) argue that if we are to achieve the current goal of bilingualism and biculturalism in inner-city schools we require some understanding of code-switching in everyday interaction. English and Spanish are the two codes which the participants in this study alternated during speech interactions.

Joshua A. Fishman (1965), has posed the general question which investigators who study code-switching seek to answer. That question which I attempted to answer in a quantitative form is: "Who speaks what language to whom and when?" The "when" segment of the question includes the function of the code-switch as well as the setting in this present study. Function is understood to mean here...

I give the data collection method and operationalize the terms used in the collection in Chapter III. The hypotheses which I tested with the quantitative data in order to answer the research question are also given in Chapter III.

Chapter IV presents the analysis of the code-switching data and answers the question of who is speaking what language to whom and when during the Spanish and English language-development classes at Garfield Elementary School. This analysis includes the functional distribution of Spanish and English in teacher utterances during these classes.

Chapter V contains the conclusions drawn from the major findings of the study. The limitations of this research and its relevance to bilingual education programs in general are also given here.

The names of the school, school personnel, and students are pseudonyms in order to ensure the privacy and anonymity of the members of the target speech community in this field study.
CHAPTER I

THE ETHNOGRAPHY OF COMMUNICATION MODEL

The Ethnography of Communication model is a current one in the field of sociolinguistics. The sub-discipline of sociolinguistics is the study of the social basis of verbal communication (Gumperz and Hymes 1972:v). The basic assumption of this field of study is that there are systematic relations underlying diversity of speech in interaction and that it is possible to describe these relations. Gumperz and Hymes (1972:vi) say:

Language usage - i.e., what is said on a particular occasion, how it is phrased, and how it is coordinated with nonverbal signs - cannot simply be a matter of free individual choice. It must itself be affected by subconsciously internalized constraints similar to grammatical constraints.

This field study focuses on the diversity of speech in teacher-student interactions during Spanish and English language-development class periods. Kjolseth (1973), Lambert and Tucker (1972), Lambert, Just, and Segalowitz (1970), and Gardner and Lambert (1972), have all expressed the need for placing data from bilingual education programs
in their specific sociocultural settings. In order to meet this need, this study uses the Ethnography of Communication model for data collection. This model formulated by Hymes (1972) is a comprehensive analytical framework for analyzing speech behavior in its specific sociocultural (ethnographic) context.

Some of the basic concepts from the Ethnography of Communication model which I used in this study are:

**SPEECH COMMUNITY** - this is the social unit of analysis; it is "a community sharing rules for the conduct and interpretation of speech and rules for the interpretation of at least one linguistic variety. Both conditions are necessary." For example, two participants in an interaction may be using English according to grammatical rules but unless they both share the same norms in regard to identifying requests, statements requiring an answer, forbidden topics, normal level of voice, marking of emphasis, etc., their messages will not get through to each other (54). In this study the speech community consists of the 225 students, 8 teachers, 4 student teachers, the guidance counselor, and the principal of Garfield Elementary School and myself.
SPEECH SITUATION - this is a situation associated with speech that is in some recognizable way bounded by a beginning and an end. Some social descriptions of such situations are ceremonies, hunts, meals, fishing trips, etc. These speech situations are the contexts for speech activity. They are not governed by rules of speaking (56). In this study the constant speech situation is the language-development class meeting.

SPEECH EVENT - this is the basic unit for the analysis of verbal interaction. This is the activity unit that is directly governed by rules or norms for the use of speech. A conversation, a lecture, an introduction, and a language lesson are all examples of speech events (56). These speech events all have an opening and a closing and a specific function. All speech events within a speech community are analyzable in terms of determinate ways of speaking. In this study the speech events are the Spanish lesson and the English lesson.

SPEECH ACT - this is the minimal unit for which one can write formal rules for occurrence and characteristics. A speech event may consist of a single speech act but usually is made up of a
series of speech acts. Greetings, farewells, jokes, and commands are all examples of speech acts (56-57). In this study questions by teachers to students during the language lesson are the most frequent speech acts.

In summary a speech act occurs during a speech event which in turn occurs within the context of a speech situation. For example, a teacher asks a question (speech act) during the Spanish language lesson (speech event) in the language-development class (speech situation).

LINGUISTIC REPERTOIRE - this is the totality of language varieties (dialects, styles, registers, or languages) available to members of a speech community (Gumperz 1972:20). Individual members of a speech community have linguistic repertoires. In Chapter II, I describe the repertoires of the teachers and students of Garfield Elementary School.

The present Ethnography of Communication model has an open set of speech components. These components provide a descriptive framework for each speech event. Each one of the speech components may be a factor in writing rules of speaking for a specific speech event. Due to redundancies, however, a relationship may be described between as few as
two speech components (Hymes 1972:59). The speech components which are relevant to this study and are analyzed in relationships are:

PARTICIPANT - this is a general inclusive term for speaker, addressee, hearer, audience, and any other person involved in the interaction (60). In this study the teachers, students and the author-researcher are the participants.

MESSAGE CONTENT - this is the topic of the speech event. Participants of a speech interaction know what the topic is and when that topic changes (60). In this study the topic of the language lesson is the message content.

SETTING - this refers to the physical circumstances of the speech event, i.e., the time and the place (60). In this study each classroom is the setting for a series of two kinds of speech events (Spanish and English lessons). The time of day of the speech events varies according to grade level.

FORMS OF SPEECH - this is the term used to describe the verbal resources (linguistic
repertoire) of the speech community. The common practice of speaking of the "language" of a community is misleading. For example, one speaks of the English language; but there exist (a) all its geographic and social dialects, (b) forms of speech based on English that are formed by addition, deletion, substitution, or permutation (Pig Latin is an example), and (c) the forms of speech specialized to specific situations (occupational registers). Given that there are few speech communities with a single "language" it can be readily seen that the number of forms of speech can be quite high (63). The cover term "varieties" is being used currently by sociolinguists for all forms of speech in a speech community. In this study I distinguished between two forms of speech. I arbitrarily categorized all the varieties that I recorded and analyzed in structured relations as either "Spanish" or "English". The focus of the study was the alternation of speech forms in these two categories (code-switching) during teacher-student interaction.

FUNCTIONS-PURPOSES - this refers to the purposes of the individual participants in
the speech event. The current literature is rich in the discussion of the functions of language. However there is not a consensus on the definition of the function of language and the functional categories into which speech utterances can be placed. Hymes (70) states that the functions of speech must be derived from the purposes of the participants who are talking in the social interaction. The most frequent definition of function of language states that it is the task or communicative intent of the interaction (Ervin-Tripp 1973:333-334, Hopper and Naremore 1973:60, and Gumperz and Herasimchuk 1972:106). In this study the function of the teachers' speech is the task or communicative intent of the interaction.

The Ethnography of Communication model is one framework for collecting data on speech behavior in a bilingual classroom. This model uses the interactional approach to language behavior. Communication is seen as a process in which the speaker selects from his communicative options after he has taken in stimuli from the environment (Gumperz 1972:15). The set of speech components and other basic sociolinguistic concepts discussed above provide a descriptive framework for the environmental stimuli of the teacher-student interactions in this study.
I found the Ethnography of Communication model to be a most comprehensive and helpful one. Hymes (1972:41) states that in order to develop models or theories of the interaction of language and social life, adequate descriptions of that interaction are needed. This study attempts one such description and its analysis.
CHAPTER II

MICRO-ETHNOGRAPHY OF THE SPEECH COMMUNITY

Garfield Elementary School is a training school for student-teachers from California State University, Northridge. This association and close communication with a nearby university is one component of the ideal English-Spanish bilingual education program as described by Andersson (1969b:168).

The community which Garfield School serves is in the San Fernando Valley section of Los Angeles. In the 1973-1974 ethnic survey made by the Los Angeles City Unified School District, about 80 per cent of the students of Garfield School were classified as members of an ethnic minority (Mexican-American). These students are by no means members of an ethnic minority within their own school community where about 80 per cent are Mexican-American. This annual ethnic survey uses the criterion of "Spanish-surname". This is an arbitrary criterion used to define the boundary between two student groups, i.e., Mexican-American and non-Mexican-American. "Spanish-surname" as an identifying characteristic reveals very little about the cultural or linguistic background of a student at Garfield School. This category lumps together all students
who might otherwise be placed at points on a "continuum of acculturation" (Christian, Jr. 1973:40) representing the languages and cultures in contact in the Garfield School community.

Garfield School receives federal funds for compensatory education programs under Title I Programs for the Disadvantaged. A school qualifies for Title I funds by being classified as one serving a low-income neighborhood.

Another guideline for Title I projects states that parental involvement is mandatory in administering the project at the local school level. At a joint meeting, the parents' advisory committee and the principal of Garfield School along with other advisers planned the pilot bilingual education project for the school year 1973-74. I attended subsequent meetings of this group at which times the goals of the project were restated and discussed.

Two long range goals of the pilot program were:
(a) to develop a model for teaching bilingual students using a Spanish teacher and an English teacher as a team, (b) to develop a bilingual curriculum designed to maintain the Spanish language. The immediate task of the program was language-development in both Spanish and English.

The goal of developing a curriculum to maintain the Spanish language is based on a basic principle of bilingual education set forth by Andersson (1969a:37) which states that it is a reasonable educational objective for children
living in a bilingual community to attain fluency and literacy in two languages by the end of the sixth grade, without any loss in academic achievement in other subjects. Since Garfield School's experimental program has the maintenance of Spanish as an educational objective, the program is classified as a "Pluralistic Model" (Kjolseth 1973:5).

The immediate task of language-development in Spanish and English was the focus of the first year of the bilingual program. Eight classrooms, 225 students, 8 teachers, and 4 student teachers (the speech community as defined in Chapter I) were involved in the pilot program. For forty minutes per day student members of this speech community received instruction in the two language varieties defined as Spanish and English under the speech component of "forms of speech" in Chapter I.

At Garfield School the pilot program was known as "The Bilingual Strand". A strand as it is used here refers to a portion of the curriculum which begins in one grade level with simple aspects of the subject and is developed vertically through the higher grades in increasing complexity. For example, the bilingual strand was part of the curriculum for two kindergarten, two first grade, two second grade, and two third grade classrooms. I refer to the pilot program as the bilingual strand in this study. During the field research period, the teachers, the students, and I used this "native" category when speaking about the program.
The forty minute bilingual strand was divided into two twenty minute segments at all grade levels except the kindergarten. Due to the half day session of kindergarten its bilingual strand period was only twenty minutes and I will describe it separately. In the other three grades two classes at each grade level were paired. Each pair consisted of a teacher of English language-development and her homeroom class and a teacher of Spanish language-development and her homeroom class. For the first twenty minute segment of the bilingual strand, the homeroom teacher gave the language lesson to her own students; for the second twenty minute segment of the strand the paired teachers exchanged rooms and gave the same lesson to the students of the paired classroom. For example, at the second grade level the bilingual strand period was from 12:30 P.M. to 1:10 P.M. each day of the week. From 12:30 until 12:50 the second grade English teacher gave an English language lesson to her own homeroom class and the second grade Spanish teacher gave a Spanish language lesson to her own homeroom class. At 12:50 the teachers exchanged rooms. From 12:50 until 1:10 the second grade English teacher gave the same English language lesson to the homeroom of the Spanish teacher while the second grade Spanish teacher gave the same Spanish language lesson to the English teacher's homeroom.

Although the time period of the bilingual strand varied according to grade level, the first, second, and
third grade paired classes followed the general pattern described above with one exception. At the third grade level, the two paired classes met jointly in one room for the entire period and each teacher, i.e., the third grade English teacher and the third grade Spanish teacher, gave the language lesson once to the joined homeroom classes.

At the kindergarten level, the paired teachers did not give a language lesson to their own homeroom classes before exchanging rooms. For a twenty minute period each day the kindergarten English teacher gave an English language lesson to the homeroom class of the kindergarten Spanish teacher and the kindergarten Spanish teacher gave a Spanish language lesson to the homeroom class of the kindergarten English teacher.

During an informal interview the kindergarten English teacher explained to me the background of the different pattern for the bilingual strand at the kindergarten level. Due to the half day session of kindergarten the overall time period allocated for the strand at the kindergarten level was twenty minutes instead of the forty minutes at the higher grade levels. This time difference resulted in 10 minute lessons in the first few weeks of the strand when the teachers followed the pattern of giving a language lesson to their own class and then exchanging rooms and giving the same lesson to the paired class.

Both the kindergarten English teacher and the kindergarten Spanish teacher agreed that the 10 minute language
lessons were "not working". The kindergarten teachers in consultation with the principal of Garfield decided that each teacher in the paired kindergarten classes would give a 20 minute language lesson to the homeroom class of the other teacher and would give the content of the daily language lesson "naturally" to her own students throughout the rest of the morning session.

As defined in Chapter I, the linguistic repertoire of a speech community is the totality of language varieties (dialects, styles, registers, or languages) available to members of that community (Gumperz 1972:20). The following language varieties were in the linguistic repertoire of the speech community participating in the bilingual strand: Yiddish, Hebrew, French, German, Chinese, Portuguese, Latin, Spanish, and English.

The linguistic repertoires of the individual teachers in the speech community are:

Kindergarten English Teacher - her native language is Yiddish; she acquired English as a second language in elementary school; she studied Hebrew, French, and German at the high school level; she studied Spanish at the college level.

Kindergarten Spanish Teacher - her native language is Yiddish; she acquired English as a second language in elementary school; she also studied
Hebrew during her elementary school years; she acquired the Spanish language at the college level.

First Grade English Teacher - her native language is English; she studied "Castilian" Spanish at the high school level for three years.

First Grade Spanish Teacher - her native language is Spanish; she acquired English as a second language while attending a private Spanish-English bilingual school in El Paso, Texas.

Second Grade English Teacher - her native language is English; she studied Spanish for two years at the college level.

Second Grade Spanish Teacher - her native language is Chinese (Cantonese dialect); she acquired both English and Spanish in elementary school in Panama.

Third Grade English Teacher - her native language is English; she studied Latin and French at the high school level; she studied Spanish at the college level.

Third Grade Spanish Teacher - her native language is Portuguese; she acquired English as a second
language at the elementary school level; she studied Spanish at the college level.

I did not collect data on the linguistic repertoires of the four student teachers in the speech community. None of the student teachers gave a language-development lesson during the field study period. However, by definition they are classified as participants in the speech events since they were in the classrooms during the language lessons.

The limitations of time, a single researcher, and the focus of this present study did not permit the collection of data on the individual linguistic repertoires of the 225 students in the speech community. I used the classroom as the unit of analysis rather than the individual student and determined the percentage of native Spanish or native English speakers in each class.

Parents and guardians specify the "language of the home" when the student is enrolled at Garfield School. The school records did not reveal any additional linguistic background for the students in the speech community. Any additional assessment of linguistic background was done on an informal basis by the classroom teacher.

Due to the existence of what Litsinger (1973:143) calls the "cover-up" of Spanish language abilities, I questioned the accuracy of parents' statements regarding the student's native language. I decided to go directly to the children and ask them to state their native language.
Table 1 below indicates the percentage of native Spanish and native English speakers in each of the classrooms.

**TABLE 1**  
PERCENTAGE OF NATIVE SPANISH AND NATIVE ENGLISH SPEAKERS

<table>
<thead>
<tr>
<th>Homeroom Class</th>
<th>Native Spanish</th>
<th>Native English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten English Teacher's</td>
<td>--</td>
<td>100%</td>
</tr>
<tr>
<td>Kindergarten Spanish Teacher's</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td>First Grade English Teacher's</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>First Grade Spanish Teacher's</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Second Grade English Teacher's</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Second Grade Spanish Teacher's</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Third Grade English Teacher's</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Third Grade Spanish Teacher's</td>
<td>84%</td>
<td>16%</td>
</tr>
</tbody>
</table>

The data for the figures for the kindergarten level in Table 1 were not obtained directly from the children. The kindergarten English teacher and the kindergarten Spanish teacher told me that in their opinion their students were too young to comprehend the question regarding the native language spoken. However they volunteered the data on the native language of their students based on the school records of statements of "home language" by the parents and guardians.

In general, children entering kindergarten who are classified as Spanish dominant using the criterion of "home language" are assigned to the kindergarten Spanish teacher; those students whose enrollment records reflect English dominance are placed with the kindergarten English teacher. This same general pattern appears to have been followed to
a degree in all the classrooms in the bilingual strand. For example, in Table 1 you will see that a higher percentage of students in the classrooms of the Spanish teacher at all grade levels except second classified themselves as native Spanish speakers rather than native English speakers.

It is possible that the report of native languages in Table 1 is no more accurate than the assessment that is determined by the "home language" classification system. My personal experience during this field study supports the existence of the "cover-up" of Spanish language abilities in the classroom. During an observation period in the first grade English teacher's homeroom, the bilingual strand unit had been completed and the students were watching a Spanish-English educational TV program. The English teacher asked three known native Spanish speakers to translate several Spanish words during the program. None of the children replied. It is possible that these children did not know any of the Spanish words but this possible denial of Spanish by native Spanish speakers bears investigation in any bilingual education program. Mackey (1968:567) says that a bilingual's attitude toward his native language and its speakers influences his behavior in different areas of contact in which each language is used.

In summary all members of the speech community have Spanish and English in their linguistic repertoires. I did not measure the degree of bilingualism but I did determine the native language of each teacher and compute the
percentage of native Spanish and native English speakers for each classroom. Of the four English teachers in the bilingual strand, three are native English speakers and one is a native Yiddish speaker. Of the four Spanish teachers in the strand, one is a native Spanish speaker; one a native Yiddish speaker; one a native Chinese speaker; and one a native Portuguese speaker. The linguistic repertoires of the bilingual strand teachers at Garfield School reflect cultural pluralism.

In general, in all the classrooms in the speech community, the teacher controlled speech usage during the speech event (language lesson). She determined the participant structure of all speech interactions. There is a definite distinction between the role of the teacher and the role of the student in the speech situations (language-development class meetings) of this present study.

It was not within the scope of this investigation to make a full description of the attitudes of each member of the speech community toward the linguistic varieties (Spanish and English) used. I did observe that the teachers frequently expressed to the students their attitudes regarding the correctness of speech in both varieties. These judgements of correctness appeared to be based on their individual normative criteria. This study focused on the attitudes of the teachers regarding the functional efficiency of Spanish and English in the classroom.
The data in this chapter combined with the units of description from Chapter I make up the context for the ethnographic study of speech use (Sherzer and Darnell 1972) during the bilingual strand at Garfield School.
CHAPTER III
DATA COLLECTION

I began data collection at Garfield School in December, 1973 and ended it in June, 1974. Prior to December, I made numerous field trips to the site in order to design a research project. During these preliminary field trips, I observed the bilingual strand language lessons and also began to gather ethnographic data. Using these observations, I planned a research project designed to make a quantitative analysis of code-switching during language lessons.

The research design required an operational definition of the phenomena to be tallied as code-switches, a data collection card for each observation period, and a coding system which would expedite the recording of incidences of code-switching.

English and Spanish are the two codes which the teachers and students were observed to alternate during the speech interactions. A code-switch was operationalized for this study as an utterance in one code during a language lesson in the alternate code. An utterance (which may be a word, a phrase, a sentence, or a series of sentences) was defined as segments of related speech on the
same topic to the same person. For example, in the three utterances below which occurred during a Spanish language lesson, the second utterance was classified as a code-switch:

Teacher - "¿Qué es ésta?"
Teacher - "I can't hear your voices, too much talking in between."
Teacher - "¿Qué es ésta?"

In another example below which occurred during an English language lesson two participants are interacting.

Teacher - "What is in the bowl?"
Student - "Fruta"
Teacher - "That's Spanish, it's fruit in English."

In the first example, one instance of a code-switch by a teacher was noted. In the second example, one instance of a code-switch by a student was noted. In summary all instances of the use of the alternate code by students and teachers except those in student to student interactions were noted. I realized in preliminary observations that student to student speech interactions were too numerous to be accurately noted.

During each observation the data on instances of code-switching were noted on a 5 x 8 index card. In the top right-hand corner, I placed either a S for Spanish or an E for English to indicate the language of the lesson. In the top left corner, I placed the data pertaining to the speech component of setting, i.e., the date, the grade,
and the room number for each observation. See Appendix A for an example of the data collection card.

In association with each card, the following contextual data were collected: the elapsed time of the observation period, the participants, the lesson content (this was equated with the speech component of message content or topic), a brief statement concerning the lesson method, and my comments which included the texts of instances of teacher code-switches. Some examples of student code-switches were collected as time allowed. For an example of this associated data, see Appendix B.

Since the Ethnography of Communication model uses the interactional approach to language behavior, it was necessary to design a coding system for noting speech interaction which would identify the speech components to be analyzed in relationships. In order to specify, "who speaks what language to whom and when," it was also necessary to code instances of code-switches in a stream of language interaction between teacher and students.

Dr. Gregory Truex suggested the basic coding system that I used to record the code-switches. Participants and forms of speech (English and Spanish), the two primary speech components involved in code-switching in the speech interactions were assigned codes according to the following system.
Participants:

T - this is the symbol used for utterances by the teacher; any of the utterances may fall into one of three categories, i.e.,

1) an utterance not part of a response set
2) an utterance in a response set initiated by the teacher
3) an utterance in a response set initiated by a student.

For example, if during a Spanish lesson, the teacher says, "All right, put your hands down," this is a case of category one; if during the same lesson, the teacher says "Can anyone tell me what it means?", this is a case of category two; if during the same lesson a student asks, "Teacher, what is that next to the 'o'?" and the teacher replies, "That's a 'j'," this is a case of category three. In each of these cases, the symbol T followed by the symbol E for English would be coded for the teacher's utterance.

R - this is the symbol used for an utterance by a student in a response set initiated by the teacher. It is followed by either E for English or S for Spanish.

? - this is the symbol used for an utterance in the form of a question by the student in a student initiated response set. This symbol is also followed by E or S indicating the
language used.

E - this symbol when not preceded by T, R, or ?
is used for an utterance in the form of a
statement by the student in a student
initiated response set. The E symbolizes
that the statement was made in English.

S - this symbol is used in the same way as the
one above. The S symbolizes that the stu-
dent's statement was made in Spanish.

Forms of Speech:

E - this symbol is used following a T to
symbolize that the form of speech used in
the teacher's utterance was English; it is
used following R to symbolize that the
student's response was in English; it is
used following ? to symbolize that the
student's question was in English. As
described above under participants, it is
used as a single symbol to symbolize a
statement in English by the student in a
student initiated response set.

S - this symbol is used in the same way as the
one above except that it symbolizes Spanish
as the form of speech instead of English.

Below are some examples of how the above coding sys-
tem was used to symbolize a stream of utterances which
occurred during a Spanish lesson.

Teacher - "Ramón, move over here."  TE
Teacher - "¿Qué es ésta?"  No symbol
Student - "Ésta es la boca."  RS
Teacher - "Muy bien"  TS

The data collection card for the above utterances looks like this - TE (RSTS). The parentheses here enclose one response set initiated by the teacher by a question in Spanish, responded to by the student in Spanish and a second turn of speaking by the teacher in Spanish. The RS implies the previous question in Spanish by the teacher. A response set as it was used in this system includes all turns of speaking in a speech interaction between a teacher and a student. A new response set begins when the participant structure of the speech interaction changes.

In general in all the classrooms in the speech community, the teacher determined the participant structure of the speech interactions. She determined and controlled all movement of the participating students; she also determined and controlled who initiated and who responded to speech in the interactions. I found it helpful in the data collection to focus primarily on the teacher in between response sets.

Here are some additional examples from the data collection cards during Spanish lessons. (?ETS) symbolizes that a student asked the teacher a question in English and the teacher replied in Spanish. (?ETE) symbolizes that
the student asked the teacher a question in English and the teacher replied in English. (TERE) symbolizes that the teacher asked a question in English and the student answered in English. (TERS) symbolizes that the teacher asked a question in English and the student answered in Spanish.

In the examples above, the tally for code-switches was as follows:

(ETS) - 1 student code-switch

(ETE) - 1 student code-switch and 1 teacher code-switch which was in response to a student code-switch

(ERE) - 1 teacher code-switch and 1 student code-switch which was in response to a teacher code-switch

(TERS) - 1 teacher code-switch

By using the above coding system, I counted all instances of code-switching as operationalized for this study. This is an important step in studying where and under what conditions alternates are used (Gumperz and Hernandez-Chavez, 1972:87).

I gathered the quantitative data in this study by sitting in the classrooms and recording the instances of code-switching manually. There are a total of 40 observations in the sample. These observations were for a period of approximately twenty minutes each and represent a total of 12 hours and forty minutes. Each setting was observed for approximately a total of one hour. The shortest time in the sample is 58 minutes and the longest time
is 67 minutes. For example, I observed the second grade English teacher with her homeroom class three times totaling 67 minutes and with the homeroom class of the second grade Spanish teacher 3 times totaling 62 minutes. In this manner for the first and second grade levels, each teacher and each class was observed for two hours. At the kindergarten level each teacher and each class was observed for one hour since the kindergarten teachers did not give the language lesson to their own homeroom classes. At the third grade level, the two paired classes met jointly. Therefore each teacher was observed for one hour but the paired classes were observed for two hours.

The setting-participant combination was the unit of observation. For example the second grade English teacher with her own homeroom class is one setting-participant combination and the second grade English teacher with the homeroom of the second grade Spanish teacher is another setting-participant combination.

I made 21 classroom test observations for a total of 7 hours prior to the 40 observations in the analysis. I developed coding skill during these preliminary classroom periods.

As I stated above in Chapter II, the school records did not reveal any additional linguistic background for the students in the speech community other than the "home language". Therefore, I decided to gather the data for the percentage of native Spanish and native English
speakers in each classroom (Table 1) by means of a direct question to the children. The limitations of time, a single researcher and the focus of this study prevented the use of instruments currently available for assessing language dominance more accurately than either asking the student or his parent for a statement of linguistic ability. Brooks et al (1970) and Burt et al (1973) have developed instruments to measure the linguistic characteristics of Spanish-English bilinguals.

There is some support in the literature for posing a direct question in order to find out what the participants themselves think about their language varieties. J. B. Pride states that when an investigator seeks factors which affect language learning, code-switching, and borrowing, he must include finding out what the participants in the speech event think about their linguistic repertoires (Pride 1971:65).

The form of the question which was posed to the children by the homeroom teachers was: "What language did you speak or understand first?" There were three possible answers, i.e., (a) a language other than Spanish or English, (b) Spanish, (c) English. No one chose (a) and the results in percentages of (b) and (c) are given in Table 1.

The idea of using this technique to determine the percentage of native Spanish and English speakers in a specific configuration of participants, setting, code, and
topic occurred to me during an informal interview with two second grade students. This interview was initiated by the students and proved to be a fruitful one for me. For a narration of this interview see Appendix C.

I gathered additional data during numerous short informal discussions with the teachers of the bilingual strand, the principal, and the counselor in the faculty dining room at Garfield School.

The hypotheses framed for testing with the data I collected were primarily based on the concept of language domain as described by Fishman et al (1971). On the completion of extensive research on bilingual Spanish-English speakers in New York City, he concluded that the two varieties (Spanish and English) were associated with particular domains by the members of the speech community. Each variety was found to reflect certain values and relationships within the speech community. For example, Spanish was associated with values such as intimacy and solidarity and was used primarily in domains such as family and friendship; while English was associated with values such as status differentiation and was used primarily in domains such as education and employment.

I made the assumption that prior to this pilot program all the teachers and students at Garfield School associated the English language variety with the domain of the school, and that the native Spanish speakers like those of Fishman's New York City study associated the
Spanish language variety with home and family. I also assumed the teacher to be a model and that her associations of language varieties and domains would influence the students' associations. Underlying these assumptions is the basic assumption of sociolinguistics that there are systematic relations between the components of the speech interaction.

Hypothesis 1. There will be more frequent code-switching by both teachers and students during Spanish lesson settings than during English lesson settings.

Hypothesis 2. The highest number of student code-switches will occur in the setting-participant combination in which the teacher has the highest number of code-switches.

Hypothesis 3. A student will code-switch in responding to an utterance by the teacher which is a code-switch.

Hypothesis 4. When the teacher code-switches, it will be related to a change in the function of the speech event.
CHAPTER IV

ANALYSIS OF CODE-SWITCHING DATA

I did part of the analysis of the code-switching data during the field study period and the balance following the completion of the 40 classroom observations. For example after each observation day at Garfield School, I classified all code-switches recorded for that day into these four categories:

1. Teacher code-switch coded as "TS"
2. Student code-switch coded as "SS"
3. Student code-switch in response to a teacher code-switch coded as "SS in response to TS"
4. Teacher code-switch in response to a student code-switch coded as "TS in response to SS"

Category 3 is a subset of category 2 and category 4 is a subset of category 1. I recorded this tally on the reverse side of the individual data collection card for each observation (see Appendix A).

Following the completion of the 40 observations in the sample, I computed the totals of the categories and compiled the following list of code-switches. This list was the basis for the analysis used to test the hypotheses.

51
Hypothesis 1 which states that there will be more frequent code-switching by both teachers and students during Spanish lesson settings than during English lesson settings is supported by the data in the above list. As you can see, there were a total of 190 code-switches (140 teacher switches and 50 student switches) during the Spanish lessons compared with 8 code-switches (2 teacher switches and 6 student switches) during the English lessons.

In order to test hypotheses 2, 3, and 4, it was necessary to break down the totals in the above list into subsets by teacher and class (setting and participant...
configurations). Below, Table 2 breaks down teacher switches (TS), Table 3 breaks down student switches (SS), Table 4 breaks down student switches (SS) in response to teacher switches (TS), and Table 5 breaks down teacher switches (TS) in response to student switches (SS).

TABLE 2

<table>
<thead>
<tr>
<th>Homeroom Class</th>
<th>Number of Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English Teacher</td>
</tr>
<tr>
<td>Kindergarten English Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Kindergarten Spanish Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>First Grade English Teacher's</td>
<td>1</td>
</tr>
<tr>
<td>First Grade Spanish Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Second Grade English Teacher's</td>
<td>1</td>
</tr>
<tr>
<td>Second Grade Spanish Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Third Grade English &amp; Spanish Teachers'</td>
<td>0</td>
</tr>
</tbody>
</table>

In Table 2 above, at the kindergarten and third grade level there are no comparison figures between the settings of teacher with her homeroom and teacher with the paired homeroom. The kindergarten teachers did not give the language lesson to their homerooms and the third grade classes were combined and each teacher gave her lesson only once per day.

Table 2 indicates that the highest number of teacher code-switches occurred while the first grade Spanish teacher was teaching the homeroom class of the first grade English teacher. While this same teacher was teaching the same Spanish lessons to her own homeroom, she made only 7
There were four setting and participant combinations in which no teacher code-switches occurred. These were: (a) the kindergarten English teacher with the kindergarten Spanish teacher's homeroom class; (b) the first grade English teacher with her own homeroom class; (c) the second grade English teacher with her own homeroom class; (d) the third grade English teacher with the combined third grade homeroom classes.

The data in Table 2 combined with the data in Table 3 below relates to hypothesis 2 which states that the highest number of student code-switches will occur in the setting-participant combination in which the teacher has the highest number of code-switches.

**TABLE 3**

<table>
<thead>
<tr>
<th>Homeroom Class</th>
<th>Number of Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English Teacher</td>
</tr>
<tr>
<td>Kindergarten English Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Kindergarten Spanish Teacher's</td>
<td>4</td>
</tr>
<tr>
<td>First Grade English Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>First Grade Spanish Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Second Grade English Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Second Grade Spanish Teacher's</td>
<td>2</td>
</tr>
<tr>
<td>Third Grade English &amp; Spanish Teachers'</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3 indicates that the highest number of student code-switches occurred while the second grade Spanish teacher was teaching the homeroom class of the second grade English teacher. There were five setting and participant
combinations in which no student code-switches occurred. These were: (a) the first grade English teacher with her own homeroom class; (b) the first grade English teacher with the first grade Spanish teacher's homeroom class; (c) the first grade Spanish teacher with her own homeroom class; (d) the second grade English teacher with her own homeroom class; (e) the third grade English teacher with the combined third grade homeroom classes.

Hypothesis 2 as stated above is not supported by the combined data in Tables 2 and 3. Table 2 indicates that the highest number of teacher code-switches occurred while the first grade Spanish teacher was teaching the homeroom class of the first grade English teacher. Table 3 indicates that the highest number of student code-switches occurred while the second grade Spanish teacher was teaching the homeroom class of the second grade English teacher.

<table>
<thead>
<tr>
<th>Homeroom Class</th>
<th>Number of Switches</th>
<th>English Teacher</th>
<th>Spanish Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten English Teacher's</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Kindergarten Spanish Teacher's</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>First Grade English Teacher's</td>
<td>0</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>First Grade Spanish Teacher's</td>
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</tr>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>Second Grade Spanish Teacher's</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Third Grade English &amp; Spanish Teachers</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 4 indicates that of the total of 56 student code-switches which occurred during the study, only five of them were in response to a previous teacher code-switch. Of these five which did occur, 4 of them occurred in the setting-participant combination of the first grade Spanish teacher with the first grade English teacher's homeroom class and 1 of them occurred in the setting-participant combination of the second grade Spanish teacher with the second grade English teacher's homeroom class.

The data in Table 4 combined with the data in Table 5 below relates to hypothesis 3 which states that a student will code-switch in responding to a code-switch by the teacher.

<table>
<thead>
<tr>
<th>Homeroom Class</th>
<th>Number of Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English Teacher</td>
</tr>
<tr>
<td>Kindergarten English Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Kindergarten Spanish Teacher's</td>
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</tr>
<tr>
<td>First Grade English Teacher's</td>
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<td>First Grade Spanish Teacher's</td>
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<td>Second Grade English Teacher's</td>
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<tr>
<td>Second Grade Spanish Teacher's</td>
<td>0</td>
</tr>
<tr>
<td>Third Grade English &amp; Spanish Teachers'</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5 indicates that of the total of 142 teacher code-switches in the study, only 16 of them occurred in a response to a previous student code-switch, i.e., in the same response set.
In addition to the data in Tables 4 and 5, it was necessary to make a further analysis of the 142 teacher code-switches before I could test hypothesis 3. Unless a teacher initiates a response set while code-switching, a student cannot code-switch in responding. Therefore, I determined the number of teacher code-switches which could possibly be responded to by a student code-switch.

Of the 142 teacher code-switches in the study, 101 were utterances that were not in a response set. For example, the following teacher utterances occurred during Spanish lessons:

"I'm going to try something different, one half at a time..."
"Close the door."
"It's very warm in here, go take your coat off."
"Raise your hand if you like the song."
"You may come back, Teresa."

There were 16 utterances in response sets in which the teacher code-switched in response to a student code-switch (see Table 5). Here is an example which occurred during a Spanish lesson:

Student - "Where do we write it?"
Teacher - "On this line."

There were 13 utterances in response sets in which the teacher switched in response to a student utterance which was not a code-switch. Here is an example which occurred during a Spanish lesson:
Teacher - "¿Cómo te llamas?"

Student - "Me llamo Anita."

Teacher - "That's very good."

The examples above represent 130 teacher code-switches which could not possibly be responded to by a student code-switch. Therefore the remaining 12 teacher code-switches which initiated response sets (the teacher asked a question and the student responded) were the only possibilities for a student code-switch to occur in response to a teacher code-switch. Out of these 12 possibilities, five did occur (see Table 4). Eleven times the first grade Spanish teacher switched code when asking a question of a student in the first grade English teacher's homeroom class; 4 times a student code-switched in response and 7 times a student responded in Spanish. One time only, the second grade Spanish teacher switched code when asking a question of a student in the second grade English teacher's homeroom class; the student code-switched in response to this question.

Hypothesis 3 is only partially supported by the data. This hypothesis was that a student will code-switch in responding to an utterance by the teacher which is a code-switch. The data indicates that the students code-switched five times in responding to 12 utterances by the teachers which were code-switches. Seven times they did not.

In order to test hypothesis 4 which states that when the teacher code-switches, it will be related to a change
in the function of the speech event, I analyzed the texts of 115 of the 142 teacher code-switches in the study. Of the 27 switches not analyzed, 25 occurred in the setting-participant combination of the first grade Spanish teacher with the first grade English teacher's homeroom class and 2 occurred in the combination of the second grade Spanish teacher with the second grade English teacher's homeroom class. It was in these two settings that the manual recording of the texts of the teachers' code-switches proved to be inadequate. I arbitrarily chose to give priority to the recording of all instances of code-switching and secondarily to the recording of the texts of the teacher code-switches.

The definition of the function of language as it is used in this study states that it is the task or intent of the interaction. There were two major tasks of the teachers during the language lessons of the bilingual strand: (1) to give instruction in the language patterns of English or Spanish; (2) to maintain class control while the first task was being accomplished. Therefore, I classified the code-switches of the teachers into two broad functional categories labeled as (1) instructive, and (2) disciplinary-manipulative. All utterances which related to explanation about the lesson, gave information about the lesson, consisted of direct translations, or were the actual target patterns of the day were placed in the first category. All utterances which related to changing or directing the
students' behavior or expressed disapproval were placed in the second. These two categories were derived from a discussion of the universal functions of language (Ghosh 1972: 57-58). I combined the two universal functions of language, i.e., disciplinary and manipulative into one functional category for this study.

Some examples of the utterances in the instructive functional category during Spanish lessons are:

"We are going to have a drill."

"These are patterns."

"This is a song about a lot of toys."

"What is your name?" (The pattern lesson of the day was ¿Cómo te llamas?.)

Some examples of the utterances in the disciplinary-manipulative functional category during Spanish lessons are:

"Close the door."

"Dick, if you can't sit there without bothering him, go sit somewhere else."

"If you'll all sit in your places."

"You may come back, Teresa."

Of the 115 teacher code-switches in this analysis, 80 (70 percent) were in the disciplinary-manipulative functional category; 29 (25 percent) were in the instructive category; 6 (5 percent) could not be classified in either category.
Since the topic of the speech event is equated with the message content (Hymes 1972:60), the topic of each lesson in the bilingual strand is the lesson content. Code-switches by the teacher in the instructive category were not associated with a change in topic. However the code-switches by the teacher in the disciplinary-manipulative category were associated with a change in topic from that of lesson content to class control. In the first case, the code changed but the topic and the function did not; in the second case the code changed and the topic and function also changed.

Hypothesis 4, which states that when the teacher code-switches, it will be related to a change in the function of the speech event, is only partially supported by the data. The above analysis of the texts of 115 of the 142 teacher code-switches revealed that when the teacher code-switches, the function of the speech event does not always change.

An analysis of a different set of functional categories might possibly yield a different relationship of code, topic, and function. This exploratory study of how two language varieties are functioning during language lessons has used only two analytical distinctions. With these limitations, it can be stated that 70 percent of the 115 code-switches by teachers in the bilingual strand served the function of class control. This kind of code-switching may be signaling to the students that English
functions more efficiently than Spanish for the "important" task of class control.

Results of hypotheses testing are summarized below:

Hypothesis 1, which states that there will be more frequent code-switching by both teachers and students during Spanish lesson settings than during English lesson settings, is supported by the data. There were 190 code-switches during the Spanish lessons compared with 8 code-switches during the English lessons.

Hypothesis 2, which states that the highest number of student code-switches will occur in the setting-participant combination in which the teacher has the highest number of code-switches, is not supported by the data. The highest number of teacher code-switches occurred while the first grade Spanish teacher was teaching the homeroom class of the first grade English teacher. The highest number of student code-switches occurred while the second grade Spanish teacher was teaching the homeroom class of the second grade English teacher.

Hypothesis 3, which states that a student will code-switch in responding to an utterance by the teacher which is a code-switch, is only partially supported by the data. The students code-switched five times in responding to 12 utterances by the teachers which were code-switches. Seven times they did not.

Hypothesis 4, which states that when the teacher code-switches, it will be related to a change in the
function of the speech event, is only partially supported by the data. When the teacher code-switches, the function of the speech event does not always change.

The above results indicate that the amount of teacher code-switching is associated with the specific setting-participant combination (Table 2). It is possible that the amount of teacher code-switching during Spanish at the first grade level is related to the percentage of native English speakers in each of the classes (see Table 1). Perhaps the first grade Spanish teacher is code-switching based on her expectations of the specific classes. While teaching Spanish to her own homeroom, she code-switched only three times for the instructive function and four times for the disciplinary-manipulative function. Her homeroom is composed of 87 percent native Spanish speakers and 13 percent native English speakers. In the other first grade, where these percentages are almost reversed, she code-switched 13 times for the instructive function, 24 times for the disciplinary-manipulative function, and 2 for unclassified functions. I assume that the 25 additional code-switches of this teacher in this same setting for which there are no texts would have followed this same pattern.

At the second grade level, the percentage of native Spanish speakers in each class is about the same as the percentage of native English speakers (see Table 1). The number of code-switches made by the second grade Spanish
teacher while teaching each of the classes does not contrast as sharply as it does at the first grade level (see Table 2).

It was not possible to make the same type of between-class comparison for the kindergarten and third grade levels as the ones above for the first and second grades. However at the kindergarten level, the English teacher did not do any code-switching while teaching a class composed of 95 per cent native Spanish speakers. Apparently this English teacher's expectations of her students to communicate in English are not based on the ethnic composition of the class.
CHAPTER V

CONCLUSIONS

This thesis applied a sociolinguistic analytical framework to a field study of code-switching between Spanish and English during language-development lessons. The major findings of this study have generated the conclusions which follow.

English is more intrusive in the bilingual classroom than Spanish. There was more frequent code-switching by both teachers and students during Spanish lesson settings than during English lesson settings. This intrusiveness was manifested by teacher responses in English to student utterances in English during Spanish lessons; by teacher responses in English to student utterances in Spanish during Spanish lessons; and especially by teacher utterances not in a response set in English during Spanish lessons.

The contrast between the amount of code-switching by Spanish teachers and English teachers may be based on their expectations of the students to communicate in the target language. This inference is based on the sixty four code-switches made by the first grade Spanish teacher while teaching a class composed of 83 per cent native
English speakers contrasted with no code-switches by the kindergarten English teacher while teaching a class composed of 95 per cent native Spanish speakers. These are the two extremes in this present study but the general conclusion is that English teachers expected the students to communicate in English regardless of their native language and Spanish teachers did not expect that students would communicate in Spanish regardless of native language.

From the functional analysis of the teacher code-switches, this study concludes that the contrast between the patterns of teacher code-switching during the language lessons may be signaling to students that English functions more efficiently than Spanish for "important" messages in the classroom. Seventy per cent of teacher code-switches during Spanish were disciplinary-manipulative in nature. These utterances were used for the purpose of maintaining class control. Even though 25 per cent of these teacher code-switches were in the instructive functional category, they frequently were used to expand or translate what had already been said in Spanish. In general, teacher code-switching during Spanish appeared to be a communicative strategy which is used by the teachers in order to be certain of communication with their students.

Gardner and Lambert's research (1972:55) has indicated that one cannot predict the achievement level of a student in language learning unless one has information about the attitudinal-motivational characteristics of the student in
regard to the target language. This study suggests that teachers may be signaling their attitudes toward the functional efficiency of Spanish to the students of the Garfield School bilingual program. The means of the program appear to be in contradiction with the goal of the maintenance of Spanish.

The obvious limitations of this study are: its specific ethnographic context of speech usage; the ritualized speech of language lessons based on pattern drills as opposed to more spontaneous speech in other types of speech events; the fact that the program focused on only two components of bilingual education and so was limited in scope; and the method used to assess the degree of bilingualism of the participants.

With these limitations this study is relevant to bilingual education programs in general. It suggests that implementers of bilingual education projects which aim to maintain the ethnic language monitor the functional distribution of both the ethnic and the non-ethnic languages in the classrooms.
BIBLIOGRAPHY

Andersson, Theodore


Brooks, Bonnie S., Gary D. Brooks, Paul W. Goodman, and Jacob Ornstein

Burt, M. K., H. C. Dulay, and E. Hernandez

Cazden, Courtney B., Vera John, Dell Hymes, Eds.
1972 Functions of Language in the Classroom. New York, N. Y.: Teachers College Press.

Christian, Jr., Chester C.

Ervin-Tripp, Susan M.

Fishman, Joshua A.

Fishman, Joshua A., R. L. Cooper, R. Ma, et al.
Gaarder, A. Bruce

Gardner, Robert C., and Wallace E. Lambert

Ghosh, Samir K., Ed.

Guide to Title VII ESEA Bilingual Bicultural Projects in the United States.
1973 Austin, Texas: Dissemination Center for Bilingual Bicultural Education.

Gumperz, John J.


Gumperz, John J., and Eleanor Herasimchuk

Gumperz, John J., and Eduardo Hernandez-Chavez

Gumperz, John J., and Dell Hymes, Eds.

Hopper, Robert, and Rita C. Naremore
Hymes, Dell

Hymes, Dell

Kjolseth, Rolf

Lambert, W. E., M. Just, and N. Segalowitz

Lambert, Wallace E., and G. Richard Tucker

Litsinger, Dolores Escobar

Mackey, William F.

Pride, J. B.

Sherzer, Joel, and Regna Darnell
Spolsky, Bernard, Ed.  
1972  The Language Education of Minority Children.  

Texas Education Agency  
Austin: Texas Education Agency.

Trueba, Henry T.  
APPENDIX A

SAMPLE DATA COLLECTION CARD

Front
Date: 3/20
Grade: II
Room: 5
(?ETS) (?ETS) TETS TE (ETE) (?ETS)
(?ETS) (?ETS) (?ETE) (ETE) (TERE)
(RSTS) (?ETE) (RSTS) (RS) (RS)

Back
1. 7 (teacher code-switch)
2. 10 (student code-switch)
3. 1 (student code-switch in response to a teacher code-switch)
4. 4 (teacher code-switch in response to a student code-switch)
APPENDIX B

SAMPLE ASSOCIATED DATA FORM

Notes on S (Spanish) card

Date:  3/20
Grade:  II
Room:  5
Time:  1:05 - 1:20
Participants:  Entire class, Spanish teacher, and researcher

Lesson Content:  Graphemes of anatomical lexicon

Lesson Method:  Each child had a picture of a human figure.  This was duplicated on the board by a transparency projection.  The teacher pointed to a specific part of the figure; asked the class to give the correct morphemes in choral response; and finally to write them in a blank space on their papers.  The context of the blanks was English not Spanish.

Comments:  These children appear to be "conditioned" to use English for asking questions.  The combination of oral comprehension and production, reading and then writing appeared to be confusing to the students - many questions on how to proceed.
TETS - "Fine, muy bien."

TE - "Put your book away."

(?ETE) - "Where do we write it?"
  "Here."

(TERE) - "Can you help him? Show him your paper."
  "Yes."

(?ETE) - "Teacher, what is that next to the 'o'?"
  "That's a 'j'."
APPENDIX C

AN INFORMAL INTERVIEW WITH TWO STUDENTS

One day about three months into the observation period I was seated on an out of the way bench on the school grounds. I had purposely chosen this location for privacy in order to write up some notes. Two second grade girls approached me and after watching me write for a few seconds, one asked, "What are you doing?" When I replied that I was writing a book, the next question was, "What about?" My response was that the book was about languages and that this was a good school to visit because most of the children speak more than one language.

It was an opportune moment to test some of the questions that I had been formulating for a potential questionnaire. In the following discourse A and B refer to the students and R refers to the researcher.

R: "How many languages do you speak?"
A: "Both of them."
R: "How many languages do you speak?"
B: "English and Spanish."
R: "Which language did you learn first?"
B: "Spanish."
R: "Which language did you learn first?"
A: "Spanish."
R: "When did you learn English?"
A: "At home."
R: "When did you learn English?"
B: "I learned with her, listening to her mother."
R: "Do you think you could learn arithmetic if it was taught in Spanish?"
A and B: "Yes."
R: "Do you think you could learn geography if it was taught in Spanish?"
A: "Yes."
B: "Yes."
R: "Do you think you could learn most anything in school if you knew the language it was being taught in?"
A: "Yes, I am."
R: "How about you?"
B: "Yes."
R: "Do you know how many languages there are?"
A: "No."

In checking later, I determined that these two students were in the bilingual teacher's second grade class. Evidently their curiosity about what I was doing during the observation periods had been aroused to the extent that they approached me and interrupted my activities in order to satisfy it. Sometimes the best ethnographic data surfaces in the most unexpected manner.

I did not seek any confirmation of the accuracy of what these students reported to me. I assume that what
they reported is what they believe to be true concerning their linguistic repertoires (Pride 1971:65).