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ABSTRACT

          The English and Spanish utterances of 19 bilingual
preschool children were monitored as they conversed with
experimenters. Characteristics of the children's language are
reported for a bilingual prestage (exhibited by the youngest subject)
and for four developmental stages in English and Spanish. These
stages were characterized by approximately parallel growth in
horizontal (structural) and vertical (functional) development in both
languages: specific instances of conformity and nonconformity to this
rule of parallelism are noted. The ability to differentiate between
the two languages developed at about the age of three years. In
addition to reporting research results, this report discusses the
problems encountered in selecting subjects. (JB)

The Study of Bilingual Language
Acquisition

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The Study of Bilingual Language Acquisition

Research over the last 10 years in the field of psycholinguistics has provided much insight into the developmental processes of language acquisition in monolingual children around the world (Bowerman 1973; Brown 1973; Slobin 1971; Gonzalez 1970). However, the area of bilingual language acquisition has scarcely been discussed in the literature. It has been suggested by Slobin (1971) that the study of language acquisition in the bilingual child may provide information as to the many areas of unexplained complexities of the formal rules of language in general.

Psycholinguistic research with monolingual children has evolved since the advent of transformational-generative linguistics (Chomsky 1957). Much of the research on the bilingual child was reported before 1957, however. As a result, this research has been analyzed and described in a very different manner from current research. Perhaps the most classic study of bilingual language acquisition prior to 1957 was Leopold's (1939, 1947, 1949a,b) detailed description of his German-English speaking child. Leopold collected language samples over a period of four years in a diary form. Included in this comprehensive body of data were discussions of the context of many of the utterances and chronological reporting of the development of vocabulary, parts of speech, and sounds. Leopold also included many of his own impressions as to the problems he felt his child encountered as she learned two languages simultaneously. However, as this study is very anecdotal in nature, there is no verification of Leopold's results. Consequently, the data analysis is not experimentally valid as it cannot be generalized to other data from bilingual children.

In much the same fashion as Leopold, Burling (1958) observed and collected various language samples from his Garo-English speaking child over a period of two

years. By chronologically recording which sounds occurred as the child acquired two languages simultaneously, Burling was able to compare the phonological development of Garo and English. Slobin (1971) also reported a study conducted by Imedadze who observed her Russian-Georgian speaking child's development over a several year period.

The previously cited research has dealt with the description of the simultaneous acquisition of two languages. Dato (1970) observed the sequential development of the Spanish of five children whose English speaking parents had moved to Madrid. The children ranged in age from four to six years. Dato reported that children who move to a foreign country and are exposed to a second language for an extended period of time are likely to learn that second language.

Other investigators have looked at the question of sequential development or "second language acquisition" (Dulay and Burt 1974; Hatch 1974). These studies are concerned with the natural acquisition of English among children with varying first languages such as Spanish, Chinese, and French. The Dulay and Burt (1974) study is a cross-sectional investigation of "natural sequences" in the acquisition of English in young children whose first language is either Spanish or Chinese. Three different methods of analysis were used to arrive at a second language acquisition sequence for English. Results showed that both Chinese and Spanish speaking children exposed to natural English peer speech acquired in approximately the same order, eleven different functors (e.g., noun and verb inflections, auxiliaries, copulas, and prepositions).

Regarding the question of second language acquisition universals, Hatch (1974) analyzed data from approximately fifteen observational studies of forty second language learners, all young children acquiring English naturally. The first language of the children varied, for some it was Spanish, for others French, and another

group spoke Japanese. Hatch arrived at a number of "universal sequences" in the acquisition of various structures of English (e.g., "all learners first use rising intonation as the preferred question form, thereby avoiding inversion.") Hatch notes that her sequences are generally universal, even though individual variation occurs in organization of rules and order of acquisition.

The most indepth study to date of the simultaneous acquisition of two languages reports that learning two languages does not differ significantly from the acquisition of one language (Swain 1973). Whether or not the child is developing in a bilingual or a monolingual environment, he uses a single set of rules, at least initially, in the learning of a language. Swain felt that a child who learned one or two languages did so within a particular "linguistic milieu". So as any child acquired languages, Swain suggested that there is an initial stage of code mixing found to be universal in linguistic acquisition.

The argument posed by Swain is based upon her interpretation of a code as

> Any linguistic system used for interpersonal communication...
> languages, dialects, and varieties of dialects are thus all
> examples of codes...in the case of the 'bilingual' individual
> it is argued that the codes used and the switches made are
> simply more obvious to the listener than in the case of a
> monolingual individual. To the user of the code, whether the
> code is a language, a dialect, or a variety of a dialect, it
> is not at all clear that the bilingual/monolingual distinction
> is a meaningful one (p. 4).

In order to comprehend Swain's proposal about bilingual language acquisition, one must observe her definition of a code.

Swain also suggested that past this initial stage of code or rule mixing, the rules of each language the child acquires begin to differentiate. Thus, the child begins using a different set of rules for both of his languages. Consequently,

this research points to the idea that bilingual language acquisition is 4 to 5 months behind monolingual language acquisition. The rationale for this point of view is that the bilingual child has more to acquire and differentiate than his monolingual counterpart. Swain based these suggestions upon her study of wh-and yes/no questions in bilingual (French and English) children. However, it must be noted that current research in monolingual language acquisition (Chomsky 1968; Brown 1973) points out that there are different rates of development for all language learners.

PURPOSE

This cross-sectionally designed study observed the language development of 19 bilingual (Spanish-English) children ranging from two years to seven years in age. The purpose of this study was to provide a more complete picture of some of the developmental processes that a child learning two languages goes through. Due to the scarcity of literature and the small number of children reported about, a more comprehensive picture of childhood bilingualism was deemed necessary. The description should provide some insights into the psycho-socio-linguistics aspects of the child who acquires two languages.

Methods

Subjects

From a pool of potential children, 19 bilingual preschool children were selected for observation. The 19 children included one 2 year old, two 2-6 year olds, three 3 year olds, one 3-6 year old, three 4 year olds, three 4-6 year olds, three children between 5 and 5 years 11 months, and three children between 6 and 6 years 11 months.

The children were chosen based on the following criteria:

1) that the amount of language the child hears in his total environment consist of a ratio of at least two-thirds English to one-third Spanish or two-thirds Spanish to one-third English;

2) that the amount of language the child uses in his total environment consist of a ratio of at least two-thirds English to one-third Spanish or two-thirds Spanish to one-third English;

3) that the children come from families of Mexican descent:

4) that the children be verbal enough to converse with strangers in Spanish and in English, and;

5) that the children acquire both the Spanish and the English language sometime between the second and the seventh year after birth.

Information regarding the children's characteristics is to be found in Appendix A. Although socio-economic status was not specifically controlled for, all of the children were from working class families.

Equipment

Sony cassette tape recorders, TC-110, with Scotch C60 minute and C90 minute tapes, were used to collect the language samples. Each experimenter also recorded data by hand on legal sized tablets. Recorded data included utterances and context. Toys, e.g. airplanes, boats, doctor and nurse kits, telephones, blocks, drawing materials, picture books, etc., were used to encourage spontaneous speech.

Utterances

Depending upon the child's attention span, sessions lasted 30, 45 or 60 minutes. To collect a representative sample from each child in Spanish and in English, a minimum of 400 utterances was collected in each language. When one language was used more frequently by a child, it was necessary to elicit more than the minimal requirement of utterances in the more frequently occurring language in order to obtain the minimum of 400 utterances in that language which occurred less frequently.

To standardize the procedure of counting the utterances across subjects, an utterance was operationally defined as: 1) a complete thought process; 2) a grammatical phrase; 3) an incomplete phrase which expressed a completed thought, e.g. the boy was...(child stops talking and becomes interested in something else); 4) a one word utterance, e.g. dog, perro; 5) a repetition elicited by "huh?", ¿"cómo?", or ¿"qué?" on the part of another individual present, which differs from the initially produced utterance.

Additionally, restrictions were placed upon the counting process in order to insure that the sample would be representative of the child's speech. Restrictions, which consisted of discounting certain utterances, pertained only to the

determination of the cut-off point for each child. They were later included in the analysis of the child's speech. They are as follows. Do not count: 1) "I don't know", "Yo no sé", or "yo no sabo"; 2) imitations; 3) yes, yeah, uh huh, sí, no, nah, etc.; 4) repetitions, following "huh?", "what?", ¿"cómo?" or ¿"qué?" that do not deviate from the initially expressed utterance. Count as two utterances: 1) a grammatical phrase containing a long pause in which the temporal period is great enough to cast doubt upon it being a single thought process; 2) grammatical phrases, e.g. clauses which are connected by "and", "y", "or", or "o" but which appear to be separate thought processes. These would not include subordinate clauses, only equal clauses.

Procedures

Four pairs of experimenters collected the language samples. Each pair consisted of one Spanish-English bilingual and one English monolingual. The bilingual experimenter spoke only Spanish and the monolingual experimenter spoke only English during all interactions with the child.

The nineteen children were distributed so that three pairs of experimenters had five children ranging in age from 2 years to 6 years 11 months, and one pair of the experimenters had four children ranging in age from 3 years to 6 years 11 months. An entire language sample for each child was collected by the same pair of experimenters.

The language sample for each child was based primarily on interaction between the experimenters and child. However, since the samples were obtained in the home in most cases, other people frequently interacted with the child as well.

In an attempt to make these extraneous interactions as similar as possible across all subjects, a parent instruction sheet was devised. The parents were asked to do the following: 1) speak to your child as naturally as possible; 2) please try not to prompt your child; 3) if you want to ask your child questions, it would be better to ask questions like, "Tell us what you did yesterday" because your child will probably answer these questions with sentences or stories; 4) if your child talks a lot about something for a while before we come over, it would be helpful if you could remember it and let us know before we begin the session. In this way we can try to always talk about things which interest your child.

For the first session, before taping any of the interactions between the experimenters and the child, an attempt was made to establish rapport with the child in order to obtain a more representative language sample. Once it was felt by the experimenters that the child was comfortable, the tape recorder was turned on. The toys were used to stimulate the child to verbalize. However, if the children verbalized without the toys, the session was carried on without them.

Procedural guidelines were set for all experimenters. They were: 1) No prompting; 2) Avoid asking questions that require a "yes" or "no" answer; 3) Avoid questions which require a naming or labeling response; 4) Repeat the child's utterance whenever possible so as to clarify it at the time of transcription; 5) When the child does not speak clearly, ask for a repetition.

Transcription

Some of the experimenters were experienced in taking and transcribing language samples. So that all of the experimenters could experience taking and transcribing language samples, there were two practice sessions. During the first session, each

group took a five minute Spanish language sample and a five minute English language
sample from a bilingual child. At this time, the other three pairs observed through
a two-way mirror. The second session was conducted in order to practice transcri-
bing the language samples previously obtained. All of the experimenters transcribed
a five minute Spanish and a five minute English sample. The transcriptions were then
compared. A third check on transcriptions was carried out once the language samples
had begun. Each group transcirbed a five minute English sample of one child from
every other group. The same procedure was carried out with a five minute Spanish
sample. The transcriptions were then compared for accuracy.

The language samples of each child were always transcribed by the experimenters
who had seen the child using both tapes and notes taken during sessions. Language
samples were transcribed in two ways: 1) by both members of the pair listening to
the tape simulatneously, and 2) by each member independently transcribing. In the
latter case, most transcripts were then exchanged so that both experimenters had
listened to each tape, in order to insure accuracy of transcription. In this manner,
most tapes were listened to by at least two people. Typed transcriptions included
a context column in which the experimenters noted events which occurred within the
child's environment that were pertinent to the samples obtained. This column was
also used to notate interesting phenomena in the child's language which were later
to be used in data analysis. Only those utterances of the people present
in the child's environment (including the experimenters) which elicited or
directly preceded the child's utterances were transcribed.

An attempt was made to transcribe every utterance made by the child. However,
if during the transcription an utterance occurred that could not be understood after
having been listened to three times, the utterance was considered unintelligible

and was. noted in the sequence of child's utterances as such. Utterances were followed by "I", "E" and "R" to dentoe imitations, emphatic statements, and repetitions, respectively, where applicable. Mixed utterances (i.e. those containing elements of English and Spanish) and utterances in which the language of child did not conform to that of the listener, were underlined.

All experimenters met one time each week. The purpose of these meetings was: 1) to discuss and standardize procedures for taking and transcribing language samples, and 2) to analyze the data.

Data Analysis

Data analysis was subdivided into five parts: 1) primary category of utterance (e.g. declaratiye statement, negation, question and command; as well as transformations, e.g. addition, movement, transposition); 2) secondary category of utterance (e.g. subject-verb agreement, passive tense, subordinate or imbedded clauses and possession); 3) parts of speech (e.g. nouns, pronouns, verbs, modifiers, prepositions); 4) over-regularizations, dealing with verbs and count nouns, and 5) mixed utterances. Parts of speech were noted as either being "present" or "absent". The "present" category was further subdivided into "always", "sometimes" or "never" conforming to the adult norm. (See appendix B.)

Seminars were conducted to carry out analysis. Each group of two age levels was analyzed separately. That is, 2 year olds and 2-6 year olds were analyzed at one session; 3 year olds and 3-6 year olds were analyzed at a second session; 4 year olds and 4-6 year olds were analyzed at a third session; and 5 years to 6-11 year olds were analyzed at a fourth session.

RESULTS

Natural language acquisition has been described as a rule governed process which becomes more complex as the child matures. Brown (1973) suggested that at the syntactic level, children progress through stages approximating adult type grammar. For example, the utterance "Rick's going" may begin with a form such as "Rick go," progressing to "Rick goed," to "Rick going," and finally to the adult form, "Rick is going" or "Rick's going" (Menyuk 1969). This type of rule governed progression also occurs at the semantic and phonological levels (Brown 1973; Clark 1973).

While traditional research had focused on chronological age as a criteria for discussing language development (e.g., McCarthy 1959 and Templin 1957), recent research in psycholinguistics (e.g., Brown 1973) has indicated that although there is a correlation between chronological age and language development, using age as a criterion does not provide any information as to what the child's language development looks like at any particular age, while determining which stage of language development the child is progressing through at a particular time does. For example, Brown and Bellugi (1964) investigated the relationship of chronological age and language acquisition by looking at Mean Length of Response by age. By observing three children, they discovered that one child had two work utterances at 18 months of age; the second child had two word utterances at 24 months of age; and the third child had two word utterances at 26 months of age. The mean age of acquisition of two word utterances was chronological age of 22-7 months. This age, however, did not represent any of the three children and would not be sensitive to the acquisition of a particular syntactic structure in any of the children. Therefore, when viewing language development, recent research indicates that a stage

orientation provides more information than does a chronological age approach.

In an attempt to clearly represent the data from this study, the language samples were categorized in two ways.. First, the language samples were separated into English language samples and Spanish language samples for each child. The reason for such a division was an attempt to determine the development and relationship fo the structures in both languages. The groups were not identical for both languages.

Because of the cross sectional nature of this study, it was not possible to be sensitive to all developmental stages in the acquisition of English and Spanish. For the purposes of this study, then, the children were categorized into four general stages of development. Selection criteria for these four stages were primarily based upon the observation of increasing syntactic complexity. found in the language samples of the children studied. Thus, the first stage was the least complex, while the second, third, and fourth stages began to more closely approximate adult type grammar.

Finally, it is important to note that although a stage analysis, and not an age analysis was used, the children, in most cases, grouped together in terms of similar ages (i.e., the 2-6 to 2-11 year olds fell into the first developmental stage, the 3 to 3-11 year olds fell into the second developmental stage, the 4 to 4-11 year olds fell into the third developmental stage, and the 5 to 6-11 year olds fell into the fourth developmental stage). One of the children did not fit into any of these stages. As a result, this child will be discussed separately.

Prestage I (Bilingual)

The youngest child observed was a female aged 2.0 years whose mother spoke English and Spanish and whose father spoke only Spanish. This child did not fit into any of the four developmental stages previously described. She had just begun to produce language and there was no differentiation between English and Spanish in her production of oral language. The child's language production consisted of lexical items from both English and Spanish. The number of English and Spanish lexical items uttered did not appear to change during her conversations with either experimenter.

In terms of horizontal development, this child was basically at a pretrans-formational stage. Most of the language samples consisted of one word utterances with only a few instances of two word utterances. The structural form of her commands generally consisted of a verb.

    a. Ten.
    b. Ven.

The child employed two types of question forms. One consisted of a declarative statement plus a rising intonation.

    a. Shoe?
    b. Esta?

The second form consisted of the lexical "what?" or the phrase, "what's that?" The only negative item she produced was "no."

Regarding her vertical development, nouns, simple present tense verb forms, and adverbs were the most frequently occurring lexical entries. To understand the semantic intent of the child, it was necessary for the experimenter to be aware of all contextual cues (i.e., linguistic and nonlinguistic events) within which the utterance took place.

ENGLISH

First Developmental Stage

There were two children in the first developmental stage aged 2-6 and 2-11. Both children were males whose parents only spoke Spanish. Transformational grammar was beginning to emerge in this developmental stage. This stage was characterized by the general use of two and three word utterances. Many utterances included a verb and some type of noun relationship (e.g., subject-verb, verb-object). Functor words or words in which the syntactic functions are more obvious than their semantic notions, such as modifiers, prepositions and conjunctions, appeared to be low frequency words in the language of these two children. The children were observed to utilize a limited variety of strategies or organizational schema governing the combination of words in the formation of declarative, command, question and negative structures. The development of organizational schema of these structures will be referred to as the horizontal development. In this group of bilingual children, mixed utterances were used frequently. That is, the child often combined elements of English and Spanish within one structure.

Horizontal Development

The declarative statements were generally in the structural form of verb-object, and subject-object.

    a. goes the airplane.
    b. I this.

Occasionally the children used subject-verb-object structures in the formation of their declarative statements. These structures were usually complete in syntactic form as compared to the adult model.

    a. I wanna play with the truck.
    b. There's a horse.

Also the children produced a declarative structure in the form of a one word

utterance, particularly in response to questions.

    a. Monkeys.
    b. Ducks.
    c. Mine.

The word order of commands used by both children in the first developmental

stage employed the verb-object form.

    a. Give me.
    b. Come on.

Often, the children used a single lexical item which, in combination with the

context of the utterance, seemed to indicate a command.

    a. Mine. (This utterance seemed to mean "Give it to me. It's mine.")
    b. Outside. (This utterance seemed to mean "Take me outside.")

In this developmental stage, the children used two types of questions,

questions seeking information and questions requiring yes/no responses. Information

seeking questions (e.g., those prefaced by who, what, where, why, how) were the most

frequently observed question form. The question word always appeared at the front

of the structure, and subject-verb inversion only occurred occasionally.

Do-insertion was not evidenced in these particular children.

    a. Who that?
    b. Where it go?
    c. What is it?

Affirmation/negation questions or those requiring a yes/no response generally

consisted of a declarative structure or of a lexical item plus rising intonation.

    a. Outside?
    b. Right here?

Negative statements occurred very frequently in the language samples of the children in this developmental stage. The negative statement consisted of a negative word (e.g., no, or the modal contractions don't and can't).

    a. No find it.
    b. I don't want to.
    c. I can't see it.

Vertical Development

Vertical development consists of the acquisition of individual syntactic classes within the organizational schema previously discussed (e.g., development of inflections of verbs and nouns, pronouns, modifiers, prepositions).

Subject-verb agreement. Although subject-verb agreement appeared in the language samples of both of the children in this developmental stage, it occurred infrequently.

    a. There's a horse and he jump.
    b. There he goes.

Verb forms. The present tense form of the verb occurred frequently. While regular past tense forms of the verb were not observed, the children used several irregular past tense verb forms.

    a. found
    b. got

The copula verb form or the different forms of the vert "to be", only appeared as a contracted part of the word that it followed.

    a. it's
    b. I'm
    c. there's

Some present progressive verb forms were also observed in the language samples of

these two children.

    a. playing
    b. going

<u>Modifiers</u>. Out of all of the language samples, only a few modifiers occurred.

    a. big
    b. hot
    c. a baby color

<u>Pronouns</u>. The children's pronouns were restricted to the use of first, second, and third person singular, nominative case personal pronouns.

    a. I
    b. You

One exception was the use of the first person, possessive pronoun "mine".

<u>Semantics</u>. An interesting structure occurred in the language samples of both of the children in this stage. The subject or the object from the main clause was repeated at either the end or the beginning of the sentence. This structure appeared to be used to highlight the theme of the statement. This phenomena will be referred to as focus.

    a. There I found it, the ball.

Second Developmental Stage

There were four children in the second developmental stage, aged 3-1, 3-3, 3-6, and 3-8. The parents of three of the chil-ren spoke only Spanish, while the parents of the fourth child spoke both English and Spanish. All but the 3-6 year old child were males.

The second developmental stage of the acquisition of English in this group of bilingual children was characterized by structural expansion. Generally, sentences were more complete in form than were the sentences found in the first developmental stage. The children were observed to utilize a variety of strategies in the formation of declarative, command, question, and negative structures. A wider variety of functor words were observed in this developmental stage as compared to the previous stage. The main additions to this stage were found in the classes of prepositions, conjunctions, and articles.

Horizontal Development

The declarative statements were generally in the structural form of subject-verb or subject-verb-object.

    a. They running.
    b. They killed the Indians.
    c. These are the soldiers.

Also, all of the children in this stage of development occasionally produced structures with the word order form verb-object. This sentence structure regularly occurred following the same or similar sentence wherein the full subject-verb-object word order form occurred.

    a. I'm gonna call my, my dad.
       Gonna call my dad.

    b. He's taking a bath.
       Taking a shower.

    c. I gonna make this.
       Make this skyscraper.

Lastly, the children produced a declarative structure in the form of a partial sentence, i.e. noun or clause (prepositional or adverbial).

a. With my friend.
b. A fire engine.
c. Down in the Coke.

These structures usually were related to a preceding sentence that was uttered by an experimenter or a third person such as the mother.

The word order of commands used by all children in this developmental stage employed the verb-object form.

a. Give me it.
b. Move that book.

One of the children produced a structure which contained the pronoun "you" in the subject position.

a. You put it back.

However, it was difficult to determine from the context whether this was a different simple command strategy, an emphatic command strategy where "you" was used for emphasis, or whether it was a request strategy where the child intended "Will you put it back?"

In this stage of development all the children produced question structures. There were three types of questions utilized: questions requiring yes/no responses; questions seeking information; and questions seeking verification/affirmation. Questions seeking information were the most commonly produced in this group. The common structural form of this type of question was question word-verb-object.

a. What's that there?
b. Why you no put this up?

The second type of question most commonly employed was the question requiring a yes/no answer. The yes/no question was consistently produced in the same structural form as the declarative, partial sentence with rising intonation. (e.g. subject-verb-object or verb-object).

a. This goes like that?
b. That's Goofy's feets?

There was no _subject-verb_ inversion or do-insertion found in the question forms of this age group.

The third type of question utilized was the question seeking verification/ affirmation or the tag question, wherein the children produced a partial statement as in the declarative structure and added at the end of the statement a one word question-form seeking confirmation of their statement.

a. Me too, huh Pina?
b. More for me, Okay?

The negative statements were the structures least commonly used by the children in this developmental stage. However, because of the limitations of the sampling procedure used, it is difficult to determine the precise nature of the strategies used in producing negative statements. Nevertheless, the samples did show that the children in this group employed all categories of negatives (no; not; modal contractions, e.g., can't don't; and negative words, e.g., nothing) and that the primacy of any specific category varied with each child. For example, one child was never observed using the "no" form, while another rarely was observed using "not". The general placement of negatives in the children's structures was (_subject-negative-(verb)-(object)_).

a. He's not talking.
b. He's no talking like that.
c. They cannot catch the cowboys.
d. They can't take them in jail.

Vertical Development

Subject-verb agreement. Subject-verb agreement was inconsistent at this stage.

a. He eats people.
b. They eats people.

Number agreement. While number agreement was generally present at this stage, there were a few cases where the noun did not agree in number with the article.

a. A balloons.

Verb forms. During stage two, a wider variety of verb tenses emerged. The present tense was always used correctly when it was used.

a. There goes the rabbit.

In addition to the use of irregular past tenses found in the previous developmental stage, a few regular past tense verb forms began to appear.

a. And the man scared the lady.
b. We went in a round thing.

However, the irregular form of the past tense appears most often in the form of commonly heard phrases.

a. I told you.
b. I found it.

Another tense which emerged at this developmental stage was the progressive tense. In most cases, the form appeared without the contracted copula.

a. I coming.

However, this tense form was often used with the pronoun plus copula contraction (e.g. he's, they're, who's, I'm, and you're) combined with the verb + "ing".

a. He's sleeping.

There were a few examples of the past progressive tense. These appeared with the phrase "I was."

a. I was getting tired.
b. I take a bath and was going on waters yesterday.

The future tense was beginning to emerge. The lexical items "I'll," "will," "could" and "should" were utilized in the future tense. However, within the context of the utterance, the future tense appeared to be lacking a time referent. That is, it seemed to be used as indicating immediate future in which an action would take place almost immediately.

a. I'll help you.
b. I could need another one.

The copula was usually produced in contracted form with a pronoun (e.g., he's, it's). Occasionally, however, the copula appeared to be used with the singular or the plural demonstrative pronouns.

a. This is your soldier.
b. Those are your's, okay Kathy?

Overgeneralizations*. Overgeneralizations first appeared in the second developmental stage. Generally, these were verb overgeneralizations (e.g., breaked, waked, felled). However, there were occurrences of noun overgeneralizations (e.g., foots, feets).

a. They breaked the house.
b. And his foots.

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*Overgeneralization has been defined as a systematic application of a regular rule which is applied inappropriately to an irregular form. For example, in English the irregular verbs are inflected for the past tense in the same manner as regular verbs, producing such lexical items as comed, goed, breaked. Another example in English occurs in the development of plural nouns where such lexical items as childs, mices, and childrens are observed. In Spanish, overgeneralizations often occur with verbs in the present and past tenses. In the present tense, stem-changing verbs and verbs with irregular first-person forms provide potential areas for overgeneralization, as for example in cayo for caigo, puedemos for podemos. In the past tense irregular verbs are inflected in a regular manner, resulting in such forms as hicio for hizo, ponió for puso. Overgeneralization of noun forms does not occur in Spanish, as there are no irregular noun forms, singular or plural.

<u>Modifiers</u>. The use of modifiers was more frequent than in the previous developmental stage. Along with this, a wider variety of descriptive adjectives were used.

    a. I call my, my secret one.
    b. No dumb things.

Also, articles and absolute adverbs emerged in this developmental stage.

    a. That's an apple.
    b. You put it backwards.

In a few cases, the singular article was used with a plural noun.

    a. A balloons.
    b. A eyes.

<u>Pronouns</u>. In addition to the first, second, and third person singular, nominative case of personal pronouns previously observed, the children in the second developmental stage began to use first, second, and third person plural nominative (e.g., you, they) and objective (e.g., you, them) case personal pronouns.

    a. Look at she.
    b. I he pulled.

Possessive pronouns also occurred frequently in this developmental stage. The children began to use first, second, and third person singular (e.g., his, her, mine) and plural (e.g., our, their) possessive pronouns.

    a. Those are mines.
    b. Look my, these are mines.

<u>Possession</u>. As was already noted, possessive pronouns were beginning to occur at this developmental stage. Also, the "'s" was also employed to express possession.

    a. A soldier's jeep.

<u>Clauses</u>. The use of the adverbial and nominal clauses emerged during this developmental stage. Of these two, the adverbial clauses were more common.

a. Put it back, Pina, where it belongs (Adverbial)
b. Who are these fall in the water there? (Nominal)

Semantics

Focus was frequently observed in all of the children in this developmental
stage.

a. They crashed, airplanes.
b. And this, what is it?

The developmental of cause and effect relationships began to occur in this
stage of development.

a. The worm can't catch the cowboys because he slip in the water.
b. Give me it or the airplane's going to hit you.

Third Developmental Stage

There were six children in this group; four males aged 4-3, 4-4, 4-9 and 4-11; and two females aged 4-5 and 4-6. The parents of two of these children spoke only Spanish. The parents of 3 of the children spoke English and Spanish. The mother of one child spoke only English, while the father spoke English and Spanish. The beginning of the third developmental stage was characterized by the more complex and frequent use of adverbial and adjectival clauses. Initially the horizontal development appeared to be more expanded than the vertical development. It was not unusual, for example, for a child to say "That's where the train pass" which includes an adverbial clause, yet the subject-verb agreement was not in the adult form. However, there was also an expansion of lexical items in many areas of vertical development (e.g. greater variety of adjectives, pronouns, prepositions).

Horizontal Development

The declarative sentences used by the children were generally in the structural form of subject-verb-object. Also, all of the children occasionally produced structures with the word order form verb-object.

a. I want to make another duck.
b. Goes over here.

Commands for the children at this developmental stage most frequently were in the structural form of verb-object word order. Occasionally the children used the second person pronoun, you, for emphasis.

a. Make a monster.
b. You find a page.

Generally, the type of question used by the children in this stage was information seeking question. Subject-verb inversion began occurring more consistantly in this

stage. While do-insertion began to appear, the main verb was conjugated rather than the auxilliary.

    a. Why are taking all the toys out?
    b. Where get dress?
    c. Why do he drinks water?

Secondary in terms of frequency of occurrance was the yes/no question. When the yes/no question was used, <u>subject-verb</u> inversion occurred.

    a. Can you hear me?
    b. Isn't this your baby?

Verification questions were not generally used by the children in this developmental stage. Occasionally, questions were asked which corresponded to the declarative sentence model with a rising intonation. However, they occurred infrequently.

    a. You like it like this?
    b. Have to find a crayon?

Negatives for these children usually involved the use of "not" or a modal contraction.

    a. He's not scared
    b. I don't have any.

In this developmental stage, the use of double negatives first appeared.

    a. But it don't have no leaves on.
    b. He don't looks like nothing.

The use of "no" for "not" occurred occasionally.

    a. He no go swimming...

<u>Vertical Development</u>

    <u>Subject-verb agreement</u>. <u>Subject-verb</u> agreement appeared inconsistently in this developmental stage. Often, however, the third person present tense form of the verb agreed with the noun.

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a. He eats these parts.
b. Maybe he go with that one.

Number agreement. Generally number agreement appeared consistently in this stage. Often, however, when a plural object followed "this is", "here's," or "there's," the verb was not pluralized.

a. This is his things.
b. Here's some spiders.

Verb forms. The children used a greater variety of tenses than were utilized in the previous developmental stage. Those used most frequently were the present progressive, present, irregular past, regular past, and periphrastic future. Occasionally the subjunctive and the future tense forms were employed. The use of copular forms remained consistent in this developmental stage.

a. And this banana.
b. I still gonna play with them.
c. What's he's writing?

Overgeneralizations. There were occasional overgeneralizations in the speech of these children. Most of them fell in the category of plural inflections improperly applied, or improperly conjugated verbs.

a. I did forgot.
b. What biggers book.
c. He gots a little bowl,

Modifiers. The children used a greater variety of adjectives and adverbs throughout this stage of development. Many of the adjectives used were absolute adjectives such as "big," and comparative adjectives, such as "bigger." Also, absolute adverbs such as "now," and adverbial clauses such as "right here" were used.

Both definite and indefinite articles were used by the children at this stage of development. The definite article was used appropriately virtually all

of the time. The use of the indefinite article was not quite as consistent.
The distinction between singular and plural was not always found. In addition
the distinction between "a" and "an" was inconsistently present.

    a. A apple.
    b. A balls.
    c. An ambulance.

Pronouns. There was occasional confusion between subject and object pronouns,
but for the most part the use of these pronouns conformed to the adult norm.

    a. My mother made it.
    b. You dropped her.
    c. They're getting fixed up.

Possession. The possessive pronoun was the most frequently used construction
for showing possession. Less frequent was the use of "'s" constructions.

    a. They're my father's...
    b. Is this yours?

Clauses. The children in this developmental stage began to use clauses with
great frequency. They were varied and complex. Adverbial clauses and adjectival
clauses were found in the speech of these children most often. However, relative
clauses were also present.

    a. When you push it down, it pops.
    b. You be the lady that's sick.

Semantics. Although focus was present, it was not frequently used by these
children.

    a. The wings, where are they?
    b. It got broke, the boat.

Fourth Developmental Stage

There were five children in the fourth developmental stage. Three were females aged 5-5, 5-6, and 6 years old; and two were males aged 5 years and 6-1 years. The parents of three of these children spoke English and Spanish. The parents of the other two children only spoke Spanish. The language of the children in the fourth developmental stage most closely approximated the adult model. Both horizontal and vertical development were more expanded.

Horizontal Development

Subject-verb-object, verb-object, or subject-verb word orders comprised the declarative statement forms.

   a. He fits right here.
   b. Gonna put the clock.
   c. I know.

Also, the children produced partial declarative statements in the structural form of a noun or clause (adverbial or prepositional). Generally these structures related to a preceding sentence that was uttered by the experimenter or a third person.

   a. A window.
   b. For the train.
   c. Right away.

Commands were typically of the syntactic form of verb-object word order. Usually, the complement consisted of a noun or pronoun plus an adverbial phrase.

   a. Leave it there.
   b. Make it more louder.

Occasionally, the second person pronoun "you" was observed in the subject position in command structures in all of the children for emphasis.

a. <u>You</u> stay over there.
b. <u>You</u> have to put that away over there.

All of the children in this stage used a variety of question forms. These forms included information seeking questions, yes/no questions, and questions seeking verification. Although all of these forms were observed at various times, the first two types appeared most prevalently. In the information seeking questions, wh- preposing appeared in all cases. Do-insertion and <u>subject-verb</u> inversion were not always present, particularly in the "where" question.

a. How could you do something like that?
b. Where this go?
c. Why you don't bring this?

In questions requiring a yes/no answer, <u>subject-verb</u> inversion was almost always present in all children in this developmental stage. Do-insertion appeared inconsistently.

a. Can we take these off?
b. Want to be a doctor?

While the children more frequently utilized the structural form <u>verb-subject-object</u> for questions requiring a yes/no response, the declarative structural form plus rising intonation was used much less frequently in this developmental stage than in previous developmental stages. The verification questions appeared sporadically in the language samples of some of the children in this developmental stage. That is, this question form not only appeared infrequently, but was not utilized by all of the children in this developmental stage.

a. This won't fit, see?
b. I'm the Indian, okay?

In this developmental stage, the children were observed to utilize an increased number of negative lexical items such as "nobody," "none," "shouldn't,"

in addition to the negative words previously observed. Generally, the word order for the negative statement was <u>subject-negative word-object</u>.

    a. I didn't go to school.
    b. I can't read.

However, some of the children used a negative word in a different part of the utterance.

    a. We better no to go dancing.
    b. He's saying just nothing.

Also, all of the children used several structures which included double negatives.

    a. I don't got nothing.
    b. Don't never get out of my garage, my house.

SPANISH

First Developmental Stage

There was one child in the first developmental stage. This child was a male aged 2-6 whose parents spoke almost all Spanish. As was observed in the first developmental stage of English, transformational grammar was beginning to emerge. This stage was generally characterized by the use of two and three word utterances which centered around the verb. The use of functor words was very infrequent in the language of this child. He was observed to employ a limited variety of strategies in the production of declarative, command, question, and negative statements. There was a lack of differentiation of English and Spanish in response to the Spanish-speaking experimenter.

Horizontal Development

The declarative statements were generally in the structural forms of verb-object or a partial sentence (e.g., noun or prepositional phrase). The partial sentences were usually related to a preceding statement of another person.

a. Quiero otra
b. A ésta señora.

Also the child in this developmental stage less frequently produced structures with the word order form, subject-verb-object and verb only.

a. Yo quiero pancakes.
b. Se quebró.

Occasionally, the child produced declarative statements with the structural form of subject-object.

a. Este yours.
b. Mamá eso.

This child's use of commands was limited. The commands were regularly affirmative informal commands. Object pronouns occurred very infrequently. <u>Verb-object</u> was the most commonly used structure for commands.

    a. Dámela ésta.
    b. Pone éste.

Occasionally, the child was observed to utilize the structural form of <u>subject-verb -object</u> for commands.

    a. Tú <u>open it</u>.

In this developmental stage, the child used two types of questions, information seeking questions (e.g. those prefaced by qué, dónde, quién, cuál, cómo, para qué, por qué) and questions requiring sí/no responses. Affirmative/negative questions, or those requiring a sí/no response, always consisted of a declarative statement or a lexical item plus rising intonation and were the most frequently observed question form.

    a. ¿Este otro?
    b. ¿Con manos?

In only four instances did the child produce information seeking questions (e.g. ¿Dónde está? was produced three times and ¿Qué es? only once).

The negative structure consisted of the negative word "no" plus a declarative statement.

    a. No cabó.
    b. No se murió.

Vertical Development

<u>Subject-verb agreement</u>. <u>Subject-verb</u> agreement was always present.

    a. Yo quiero cabe
    b. Aquí está otra.

Verb forms. .The child was beginning to use present preterit and periphrastic future (i.e. a conjugated form of "ir" plus "a" plus an infinitive) verb forms.

a. Quiero una.
b. Ya se quebró
c. La voy a jugar, abajo

Modifier-noun agreement. Although modifiers were infrequently used, they always agreed with the noun.

a. Mira el gusano.
b. ¿Una tortilla?
c. Unas canicas.

However, when the child referred back to an object not specifically mentioned within the utterance, there was not modifier-noun agreement.

a. Una pon in (referring to gusano).
b. ¿Uno? (referring to tortilla)

Object pronouns. The direct object pronouns appeared to be emerging in this developmental stage. However there were only two examples observed in the language samples of this child.

a. Ponle tú, Ponlo tú (latter is a self-correction).
b. Lo pon ésta (should be Ponla ésta).

In both examples, there was confusion as to the correct placement of the pronoun within the structure as well as confusion as to the correct pronoun form (e.g., le vs. lo).

Possession. The only forms used to show possession were possessive pronouns.

a. Es mió.
b. Son tuyas.
c. Mi mano.

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Second Developmental Stage

There were four children in this developmental stage, aged 2-6, 3-1, 3-3, and 3-6. The parents of three of the children spoke only Spanish, while the parents of the fourth child spoke English and Spanish. All of the children but the 3-6 year old child were male.

. . The second developmental stage within this group of bilingual children was characterized by structural expansion. Greater variety was noted in the syntactic structures utilized in declarative statements and questions. Command forms were more elaborate with the addition of direct object pronouns. A greater frequency of negative commands were observed than in the previous developmental stage. At this stage, the children produced clauses to express cause and effect relationships. In these clauses, the use of the subjunctive began to appear.

Horizontal Development

The declarative statements used by this group of children exhibited a wide variety of syntactic structures. The declarative statements generally were in the structural form of verb-object or subject-verb-object.

a. Ya quebró algo.
b. Yo tengo uno de esos.

Also, all of the children in this stage of development often used structures containing only a verb.

a. Se cayó.
b. Andan corriendo.

As was observed in the previous stage, the children produced a declarative structure in the form of a partial sentence which related to the preceding utterance produced by another person.

a. Y ahora esto.
b. También estos y estos.

The children provided appropriate verb inflections for the command form, however none of the children consistently used formal or familiar command forms. Generally, the verb forms for formal and familiar commands were used interchangeably by the children, even though they were able to consistently differentiate between the use of "tú" and "usted" in declarative statements. At this stage of development, the children were using direct object pronouns attached to the end of the affirmative command verb form.

a. Póngalo aquí.
b. Oye, lava la mano a él.

Negative commands were also observed, although infrequently. They were produced with the direct object pronouns preceding the verb.

a. No lo meta aquí.
b. No ensucie con éste.

Two types of questions were used by the children in this developmental stage, information seeking questions and questions requiring a sí'no response. Information seeking questions were the most frequently observed question form. The question word always appeared at the beginning of the utterance and no subject-verb inversion was observed.

a. ¿Qué paso acá?
b. ¿Adonde vamos?

The sí/no questions consisted of a declarative statement plus rising intonation.

a. ¿Le bajo allí al agua?
b. ¿Está quebrado?

The least commonly produced question form in these children was the tag question.

a. Aquí hay un pájaro, eh mamí?
b. Es policía, verdad?

All but one of the children in this stage produced negative statements. In general, these were of the form (subject)-no-verb.

    a. Este no es carro.
    b. No quiero este.

One child utilized a double negative construction.

    a. No hay nadie allí.

Vertical Development

Subject-verb agreement. Subject-verb agreement was generally consistent at this stage.

    a. Van á apagar un luz (van referred to bomberos)
    b. Tú te lo llevastes.

However there were occasional exceptions.

    a. Está comiendo plátano (where "yo" is the understood subject).

Verb forms. The children of this group used present, preterit, periphrastic future, present progressive verb forms.

    a. Ahorita van a ir allá.
    b. Estaba mí teacher boy.
    c. Voy a hacer la cabeza.
    d. Estoy haciendo un ...

In addition, two children used the imperfect and the past perfect verb form.

    a. Estaba mí teacher boy, él tenía un Big Jim.
    b. Se han ido.

In the subjunctive, present verb forms were used by three of the four subject.

    a. Pá que se muera.

Overgeneralizations. Overgeneralizations were occasionally observed in the language samples of these children. The majority of the overgeneralizations occurred with verb forms.

a. Me cayo. (Should be "me caigo")
b. Ponger. (Should be "poner")
c. Puedemos. (Should be "podemos")

<u>Modifier-noun agreement.</u> Number and gender agreement between adjectives and

nouns was generally present. However, adjectives are not frequently used.

a. No quiero ver este libro.
b. Chiquitos. (referring to "pescados")

Occasionally, there was number and gender agreement between determiners and nouns.

a. El bebito.
b. Poniendose los calzones.

More often, however, the determiner did not agree with the noun in number and gender.

a. Una plátano grandote (should be "un" instead of "una")
b. Un pantalones (should be "unos" instead of "un")

<u>Object pronouns.</u> Reflexive and direct object pronouns were the most frequently

used object pronouns.

a. Yo lo voy a hacer.
b. Se va a caer si no, no se cuida.

Indirect object pronouns were used less frequently and with less proficiency.

For example one subject created the occasion for the use of "le" in the utterance

"Lava la mano a él", but the object pronoun "le" was not present in any utternace

in the sample obtained. Generally objects agree with their antecedents. First

and second person object were used appropriately.

a. Ya me voy para la casa.
b. Te pago.

There is some evidence of lack of differentiation between the indirect and direct

object third person pronouns, "le" and "lo".

a. Echarles aquí. ("Los" is appropriate)
b. ¿Como le hizo? ("Lo" is appropriate)
e. Le pequé. ("La" is appropriate)

<u>Possession.</u> The children used the "de" plus noun/pronoun form to indicate possession.

    a. Este es el moto del señor.
    b. Es de una maestra.

Some possessive pronouns were used also (e.g. mi, tu).

    a. ¡Ay, sus ojitos!
    b. ¿Este es tu libro?

<u>Clauses.</u> Clauses began to appear in this developmental stage. Nominal, adverbial, adjectival, and subjunctive clause forms were used.

    a. ¿Un monstruo que fue así?
    b. Es pa cuando se cuelga Big Jim.

Of the children who used the subjunctive, two usually provided the inflectional changes in the verb required in the adult norm. One subject usually supplied the syntactic occasion for the subjunctive, but used the indicative form of the verb in the dependent clause.

    <u>Semantics.</u> Focus was observed in all of the children in this developmental stage.

    a. Mira esta, una casa.
    b. Está mojado este, el zacate.

At this stage of development, the children were beginning to make comments about cause'effect relationships.

    a. Experimenter: ¿Te gustan los animales?
        Child: No
        Experimenter: ¿Por qué no?
        Child: Porque me pican.

Third Developmental Stage

There were seven children in this group, five males aged 3-6, 4-2, 4-2, 4-8 and 4-10 and two females aged 4-3 and 4-5. The parents of three of the children spoke English and Spanish. The parents of two of the children spoke only Spanish. The father of the last child spoke English and Spanish while the mother spoke only English.

The third developmental stage of language acquisition in this group of bilingual children was characterized by the utilization of a greater variety of strategies to formulate command and negation statements. Also the children used adverbial, nominal, and adjectival clauses with greater frequency. In general, while the horizontal development appeared to be more expanded than the vertical development. There was also an expansion of lexical items and verb forms.

Horizontal Development

The declarative statements were generally in the structural form <u>verb-object</u> or <u>subject-verb-object</u>.

    a. Tiene la falda.
    b. Un conejo anda comiendo.
    c. Yo tengo mi tren.

The subject pronouns were often not used since the verbs are inflected. Also the structural forms <u>verb</u> and <u>verb-subject</u> were found, although less frequently.

    a. Está trabajando
    b. Hay un monito.

There were also some structures in the form of a partial sentence which, again, were in response to utterances previously produced by another person.

    a. Con una tualla.
    b. Abajo.

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Most of the commands were in the familiar form. None of the children had more than one command in the formal form. Almost all of the commands were inflected. As a result, very few subject pronouns were used. The structural form of the commands were in the form of <u>verb-object</u> word order.

    a. Dámelo.
    b. Ponte los lentes.

The children also used negative commands in the structural form of <u>no-verb-object</u>.

    a. No te muevas la mano.
    b. No se lo quitas.

There were three types of question forms commonly utilized by the children in this developmental stage: information seeking questions, questions requiring a sí/no response and tag questions. The most frequently employed question form was the information seeking question.

    a. ¿Cómo se llaman?
    b. ¿Cual quiere ir para fuera?

<u>Subject-verb</u> inversion was emerging in this developmental stage although its use was infrequent.

    a. ¿Dónde está el otro pedazo?
    b. ¿Qué está color rojo?

The structural form for sí/no questions was generally a declarative statement plus rising intonation.

    a. ¿Se puede jalar?
    b. ¿Un arbolo?

Again, <u>subject-verb</u> inversion was observed, though infrequently.

    a. ¿Se llaman animalitos?

"Verdad" was used frequently as a tag question at the beginning and end of utterances, as well as "eh?"

a. ¿Que es aquí, eh?
b. ¿Verdad que no?

The children in this stage generally produced negatives with the structural form of (subject)-no-verb-object.

a. No tiene una puerta allí.
b. No me gusta este libro.

Negative lexical items began to appear in the language samples of these children (e.g., nada, nadie).

a. Nadie está manejando.

The use of double negatives was also observed.

a. Esto no hace nada.
b. No se llama nada.

Vertical Development

Subject-verb agreement. Subject-verb agreement was consistently present.

a. Son muchos animales.
b. El va a agarrar las vacas.

Verb forms. The children used a greater variety of tenses than were employed in the previous developmental stage. Those most frequently used were the present tense, the preterit, the imperfect, the present progressive, the periphrastic future and the present and past perfect forms of the indicative. Occasionally, the children used the subjunctive verb form.

a. Yo estaba, yo estaba jugando cuando...
b. Mira, yo hizo una letra con este.
c. Pa'que tu me saques.

Overgeneralizations. Almost all of the overgeneralizations occurred with "-er" irregular verbs. The most commonly overgeneralized verbs were poner, saber, hacer, tener and caer.

a. Mira como se hizio.
b. Poni un <u>stick</u> allí.

<u>Modifier-noun agreement</u>. There was an increased use of modifiers in this
stage of development. Number and gender agreement between adjectives and nouns
tended to be consistent.

a. Esos todos van allí.
b. Es otro carrito.

Number and gender agreement between determiners and nouns was inconsistent.

a. Ese va con el oso.
b. Ahora un chiquitos ("un" should be "unos")
c. ¿Dónde está el chupadera? ("el" should be "la")

<u>Object pronouns</u>. There was frequent use of direct, indirect and reflexive
pronouns.

a. Ahorita te lo voy a dar.
b. ¿Por qué se quita?

Again, there was a tendency to confuse the third person direct and indirect object
pronouns "lo/le." However, "lo" was usually not confused where it normally
should have appeared but, rather, was confused where "le" was normally used.

a. Voy a hablar a mi papa.
b. La ponió las aretes.

<u>Possession</u>. Again in this developmental stage, the possessive was marked
through the use of "de" plus a noun/pronoun or possessive pronoun (e.g., mío,
tuyo, suyo).

a. ¿Tú tienes uno de esos que van muchos así...?
b. No, no garres mis colores.

<u>Clauses</u>. At this stage, the children used, with greater frequency, a wider
variety of clauses than did the children in the previous developmental stage.
These clauses were also more expanded than those previously observed. Most were
adverbial and nominal with some adjectival and subjunctive clause evidence in

the language samples.

    a. El elefante que hicio pipi estaba llorando.
    b. Ella sabe que es.   )
    c. ¿Pa' qué te lo pongas, Norma?

<u>Semantics</u>. Focus was observed more frequently in all the children in this developmental than in the first two stages.

    a. Está saliendo de allí, agua.
    b. El monito, este.

Much the same as in the second developmental stage, statements expressing cause and effect were present though infrequently employed.

    a. No le digas a mi mama, porque se enoja.
    b. Este va a ir con él porque está color rojo.

Fourth Developmental Stage

There were six children in the fourth developmental stage. There were four females aged 5-8, 5-9, 6-0 and 6-3. There were two males aged 5-0 and 6-0. The parents of four of the children spoke only Spanish. The parents of two of the children spoke English and Spanish. Both horizontal and vertical development were more expanded than was previously observed in the other developmental stages.

Horizontal Development

<u>Verb-object</u> and <u>subject-verb-object</u> word orders generally comprised the declarative statement forms.

    a. Yo pensaba que estaba feo este libro.
    b. Voy a hacer una casa.

Occasionally, the structural form of <u>verb-subject</u> was used by the children.

    a. Estaba un <u>bird</u>.
    b. Pican los <u>chongos</u>.

Command statements took the form of <u>verb-subject-object</u>. Familiar as well as the formal command forms appeared in the speech of most children.

    a. Canten, ya te doy comida (formal).
    b. Mira la caja (familiar).

Affirmative commands were more prevalent in the language samples of the children in this stage than were the negative commands.

    a. Pon esto aquí. (affirmative command)
    b. Tonces vente conmigo. (affirmative command)
    c. Otra vez, no te comes la ropa. (negative command)

When object pronouns occurred with the command form, they were properly placed for affirmative and negative commands.

    a. No la metas.
    b. Guárdalos.

The children of the fourth developmental stage produced three types of question forms, questions seeking information, questions requiring a sí/no answer, and questions seeking verification, or tag questions. In the information seeking questions, the question word appeared at the beginning of the structure in all cases, occasionally accompanied by <u>subject-verb</u> inversion.

    a. ¿Dónde vas tú? (<u>subject-verb</u> inversion)
    b. ¿Por qué ella está riéndose? (no <u>subject-verb</u> inversion)

The children produced two structural question forms for questions requiring a sí/no response: <u>verb</u>-(<u>subject</u>)-<u>object</u> or a declarative statement plus a rising intonation.

    a. ¿Quieres que te mate?
    b. ¿Esta es?

Tag questions were frequently used by the children in the developmental stage. Generally, a declarative statement would be followed by "verdad" or a form of the verb "ver".

    a.   ¿Una víbora, ve?
    b.   ¿Este va aquí, verdad?

The use of the negative word "no" preceded the verb in the negative statements produced by children in this developmental stage.

    a.   No me lleves mi ropa.
    b.   Ya no me acuerdo de mucho yo.

Also, the children used a great variety of other negative forms (e.g., nada, nadie, nunca, ni).

    a.   Es que nadie juega conmigo.
    b.   Nada.

Double negatives were also employed though infrequently by the children in this stage.

    a.   Ya no falta nada.
    b.   Porque casi no tenemos nada de comida.

Vertical Development

Subject-verb agreement. Subject-verb agreement occurred consistently in this developmental stage.

    a.   Yo no le quiero decir.
    b.   Estos son para las muñequitas de acá dentro, verdad.

Verb forms. The children utilized the same verb forms in this developmental stage as in the previous stage with the addition of the conditional and future tenses.

    a.   Me gustaría.
    b.   Será.

Overgeneralizations. Again, as in the last stage, most of the overgeneralizations occurred with "-er" irregular verbs. The most commonly overgeneralized verbs were poner, saber, querer.

Modifier-noun agreement. Adjectives and adverbs were moderate in number in the language samples of these children. Adjectives and nouns usually agreed in number and gender in the speech of all children. Also, there was little disagreement between nouns and articles.

    a. Lloró porque esa está grandote pues y esa está chiquita.
    b. ¿Por qué los carros se van acá?

Occasionally there was not only a lack of agreement in number and gender between determiners and nouns, but the article was sometimes omitted.

    a. Es una tonto. (should be "un" tonto)
    b. Van a agarrar todos malos. (should be "unos" malos)

Object pronouns. "Le" and "lo" confusion was still occurring although very infrequently.

    a. Y las bumpers le estaba.

"Le" and "lo" were also omitted from the speech of several of the Stage Four children.

    a. Porque yo voy a hacer ahorita.

There was some number/gender disagreement between the direct object pronoun and its antecedent.

    a. Y luego esta lo ponemos.
    b. ...Pero unos no la vi.

Possession. Most of the Stage Four children used the structure "de" plus noun to form the possessive. Possessive pronouns such as mi, ti, etc. were used frequently also.

    a. Es del niño.
    b. Ana es la hermana de Lily.

Clauses. Adverbial clauses, adjectival clauses, nominal clauses, and subjunctive clauses were used frequently in the speech samples of all children.

a. Aquel, donde están los animalitos pa' ponerlos.
b. Tiene que está un animal que le gusta adentro del agua.
c. Yo pensaba que estaba feo este libro.
d. Eso es la puerta pa' que salgan los de adentro.

Semantics. Focus was again observed in the language samples of the children in the last developmental stage.

a. Eso lo pongo para atrás.
b. Cosas, muchas cosas.

Statements containing cause and effect relationships were employed more frequently by the children in the last developmental stage.

a. Está brincando porque está lavando.
b. Se quebraron porque no oí tampoco.

Discussion

It has been the primary intent of the present paper to provide a broad description of the linguistic development of English and Spanish among young bilingual children. While the analysis treated the development of English and Spanish as separate strands, the discussion will attempt to bring the strands back together in order to summarize as specifically as possible the present findings about bilingual language acquisition. Background data on the children will be included in the discussion in order to provide a more complete picture about how these children developed bilingually.

The Bilingual Children: Who were they and where did they come from?

One of the most fascinating aspects of the research for the present paper was the search for bilingual children. More than sixty families were interviewed in an attempt to locate children who could meet the criteria required by the study. Each child had to be simultaneously acquiring both English and Spanish, and each had to be productive in both languages. The ratio of production of the dominant language to the subordinate could not exceed two/thirds. The children who were able to meet these criteria fell into three groups to be discussed presently. First, however, it is worth discussing the children who were not able to meet the criteria.

The largest proportion of children unable to meet the language requirements of this study fell into the youngest age groups, the two year olds and the 2-6 year olds. Several children were interviewed from each of these age groups, and sampling was begun with most of them. However, the data from only one two year old and two 2-6 year olds was used in the final analysis. In all of the other

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cases, the children demonstrated too much preference for their dominant language
to be used in this study. Considering the great effort put forth in the search
for infant bilinguals, it seems fair to suggest that most children who become
bilingual in Spanish and English (in the Santa Barbara-Goleta area) do not begin
to exhibit bilingualism until a later age, around three years. That is to say
that most potentially bilingual children in this area begin as monolingual Spanish
speakers, and pick up English as they begin to have contact with English speakers.

The children who participated in the present study fell into three groups
according to language dominance. These groups suggest certain factors affecting
bilingual development. The ten Spanish-dominant children were all children of
monolingual Spanish speakers. Their English was learned either in schools or
day care centers or from older siblings. The four children for whom no dominance
was detected were all children of bilingual parents, with one exception. This
child's parents were monolingual Spanish speakers. However, this child's friends
were generally monolingual English speakers. The children in this group thus
began learning both English and Spanish at home. The four English-dominant
children were the children of bilingual parents, with one exception. This child's
parents were monolingual Spanish speakers. However, she was the youngest child
in the family and had several bilingual siblings. In addition the child had
attended public school for one year, with all instruction in English. This group
of children also began learning English and Spanish at home.

These observations suggest some patterns concerning the occurrence of
bilingualism in this area. The largest number of bilingual children come from
monolingual Spanish-speaking homes. For these children, who tend to be Spanish-
dominant, bilingualism is imperative if they are to function both in the home and

outside the home in an English-speaking society. For the same reasons, these are
the children who are most likely to maintain both languages as they grow up.
In homes where parents and siblings were bilingual, two patterns occurred. One
pattern was the careful maintenance of both languages. The other pattern was the
maintenance of both languages, with a tendency for the children to become English-
dominant. These dominance patterns suggest a continuum from monolingualism in
Spanish toward monolingualism in English. This tendency toward linguistic assimi-
lation is predictable and has been documented elsewhere (Fishman 1967, Hymes 1967).
While the social considerations of bilingual development were not the main concern
of the present study, they have been summarized as pertinent to the characterization
of the children who participated.

How did these children develop bilingually?

The children in this study were considered to be acquiring English and
Spanish simultaneously. It was originally hoped that all children who participated
would have been learning both languages from the moment they first began to talk.
However, it was found that many of the bilingual children interviewed had not been
bilingual all their lives, but had started out as monolingual Spanish learners
who began learning English as a second language somewhere between the ages of
three and five years. (These children were usually from monolingual Spanish-
speaking homes and began learning English through school or day care experiences.)
About half of the children who participated in this study fell into this
"sequential" category. At some earlier point in their English language development,
their speech could have been analyzed in terms of second language acquisition.
However, at the time of the study, they were proficient enough as developing
bilinguals that their speech did not differ in any significant way from the

speech of the bilingual children who had been speaking both English and Spanish all their young lives. The only difference exhibited by the "sequentially-developed" bilinguals was their preference for Spanish, even though their performance ability in English was strong. It seems that sequential second language learning at such an early age is of interest while the child is <u>in the process</u> of becoming bilingual. Once bilingualism has been achieved, however, the young child handles both languages as native languages, and cannot be distinguished from the child who has been speaking both languages all his life. Some research suggests that the ability to acquire a second language with native-like proficiency decreases as the child approaches puberty (Lenneberg 1967) and that this ability is governed in part by certain specific neurological mechanisms whose functioning declines around puberty.

It is interesting to note that one child in the present study appeared to be very much in the process of becoming bilingual. Her Spanish was at par with that of the children in the fourth developmental stage, while her English was approximately two developmental stages below her Spanish. Her English could only have been analyzed in terms of second-language acquisition; and thus was not included in the final report here. It is of interest to note, however, that the structures she used in English were very similar to those used by children at the second developmental stage in English, although her thoughts tended to be more complex. Actual cases of interference from Spanish to English were not found. In a general and tentative way, the English speech of this child resembles that of other children learning English as a second language (see Dulay and Burt 1972 and 1974). <u>What were the general stages noted in bilingual development?</u>

The language data from the children between the ages of 2-6 and 6-0 years suggested four definable developmental stages in both Spanish and English. The

data from the one 2-0 year old posed several problems, however, when the time came
to match children and developmental stages. First of all, with all the other
children English was analyzed separately from Spanish. With the two year old,
however, it would have been misleading to separate her utterances into these
categories. At no time was any differentiation made between the two languages.
Her utterances, which were all one to three words in length, occurred in both
English and Spanish with both experimenters. Furthermore, there was no item
duplication between languages. Thus she used the word shoe, but never zapato;
she used the command ten in Spanish, but never its English equivalent, take (it)
or have (it). In a very real sense, this child's first language was bilingualism.

A second problem with this child's first language data was that her utterances
were fewer in number than those obtained from other subjects. Furthermore, no
other children in the study appeared to resemble her developmentally as far as
language was concerned. As mentioned earlier, infant bilinguals were nowhere to
be found. For these reasons, no definitive statement could be made about this
earliest "stage" of bilingual development. If more data from other children had
supported this pre-differentiation stage, it would have been considered with
greater confidence as the first stage in bilingual development. It is important to
note that a similar pre-differentiation stage has been observed elsewhere, which
led to the hypothesis of bilingualism as a "first language" (Swain 1972).

The data from the two 2-6 year olds tends to lend support to the idea that
bilingual children develop from a stage of pre-linguistic differentiation to a
stage of linguistic differentiations, with regard to the two languages they are
acquiring. Each of these children appeared to be in the process of learning to
differentiate between their two languages. In each case, the child tended to

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differentiate less when using his subordinate language. By the time the children had reached the second developmental stage in both their languages, around the age of three years, the ability to differentiate between languages was well established. From that point on, all children demonstrated a remarkable awareness of their bilingualism, as indicated by their ability to use only the appropriate language with each experimenter most of the time.

Below is a summary of the four developmental stages of bilingual language acquisition observed among the children in this study. The pre-differentiation stage is labeled as a pre-stage, and is tentatively placed as the first developmental stage, for the reasons outlined above.

Summary of Development of English and Spanish in Bilingual Children

Prestage I - Bilingual

1. One- and two-word utterances used including declaratives, commands, questions and negatives.

2. No differentiation between Spanish and English.

3. No indication of transformational grammar.

English	Spanish
Stage I	**Stage I**
1. Two and three word utterances: declaratives, commands, questions and negatives.	1. Two and three word utterances: declaratives, commands, questions and negatives.
2. Transformational grammar began to emerge.	2. Transformational grammar began to emerge.
3. Differentiation between Spanish and English began to appear.	3. Little differentiation between English and Spanish.

English	Spanish
### Stage II	### Stage II
1. Horizontal development - structural expansion with a greater variety of strategies used in the formation of declaratives, commands, questions, negatives.	1. Horizontal development - structural expansion, use of clauses to express cause/effect relationships, appearance of the subjunctive mood.
2. Vertical development - functor words began to be used.	2. Vertical development - expansion notable in verb use, command forms more elaborate.
3. Ability to differentiate between English and Spanish became established.	3. Ability to differentiate between Spanish and English became established.
### Stage III	### Stage III
1. Horizontal development - appearance of adverbial and adjectival clauses.	1. Horizontal development - more types of clauses were used with greater frequency.
2. Vertical development - greater variety of adjectives, pronouns, prepositions; refinement still lacking in some areas, e.g., subject-verb agreement.	2. Vertical development - more lexical items and verb forms
3. Differentiation between English and Spanish.	3. Differentiation between English and Spanish
### Stage IV	### Stage IV
1. Horizontal and vertical development - expansion.	1. Horizontal and vertical development - expansion.
2. Language began to approximate adult model more closely.	2. Language began to approximate adult model more closely.
3. Differentiation between Spanish and English.	3. Differentiation between English and Spanish.

Code-switching and code-mixing

As mentioned earlier, these children were observed to develop the ability to differentiate between their two languages by about the age of three years. The experimental design with the two "monolingual" experimenters practically required them to differentiate if they were able to do so. In some cases, in fact, the child's tendency to differentiate between languages increased during the time in which language samples were being taken. Of course in bilingual communities it is not nearly as necessary to keep one's languages separate as it was during the taping sessions of the present study, thus the occurrence of code-switching and code-mixing. Due largely to the limitations imposed upon the children by the experimental design, code-switching and code-mixing seldom occurred in this study. When code-switching did occur, the child was usually speaking to someone other than. the experimenter, such as the mother. Nearly all instances of code-mixing occurred with single lexical items, usually nouns. In these cases, it appeared that the lexical item was simply more available in the other language. Indeed, code-mixes usually consisted of borrowing from the dominant language. The social factors operant in bilingual communities which foster code-switching and code-mixing were notably absent from the taping sessions of the present study. (See also Gumperz 1964, 1967, and Hymes 1967.)

Comparing the development of English and Spanish

Although this study focused primarily on the separate development of English and Spanish in bilingual children, certain interesting similarities and differences became apparent in the analysis. These similarities and differences tended to stem from structural similarities and differences between the two languages, English and Spanish.

A broad and basic similarity in the development of English and Spanish among these bilingual children was the early and stable development of horizontal strategies (i.e., the basic organizational scheme governing combinations of words in the formation of declarative and negative statements, questions, and commands). Vertical development (i.e., the acquisition of syntactic classes within organizational schema), on the other hand, was characterized by variation and inconsistency in both English and Spanish. Thus, for example, the horizontal strategy manifested in utterances of the type subject-verb-object were established quite early in English (around 2-6 to 3-0). However, subject-verb agreement, a vertical aspect of English, appeared inconsistently, with some inappropriate usage occurring at all ages observed. Likewise, in Spanish, for example, the horizontal strategy manifested in utterances of the type subject-verb-object also became established quite early (around 2-6 to 3-0). On the other hand, variation in vertical development was evidenced in the inconsistent occurrence of determiner-noun agreement (in number and gender), a phenomenon which persisted in all ages observed.

Among the more specific similarities noted were certain parallels in the development of question strategies in English and Spanish. Intonation was the first marker used to indicate a question, in both English and Spanish (e.g., shoes?, ¿está?). Soon information questions began to be used (e.g., questions beginning with who, what, where, or quién, qué, dónde). Next, tag questions appeared. Thus, in both English and Spanish, similar strategies were developed and these strategies appeared in basically the same order. In both languages, more complicated inversions and insertions (e.g., subject-verb inversion[1] do-insertion, modal-insertion) tended to appear late, around age 4 or 5; while the other strategies mentioned above tended to appear early, between 2 and 3, and continued to be used frequently by both the younger children and the older ones as well.

This sequence of question-strategy development noted in <u>both</u> Spanish and English
for these bilingual children was similar to the sequence noted by Hatch (1974)
in her analysis of the acquisition of English as a second language in forty chil-
dren. The only difference in sequence was that Hatch found tag questions
preceding Wh- questions (i.e., information seeking questions).

One apparent difference in the development of English and Spanish occurred
with <u>subject-verb</u> agreement. In English, <u>subject-verb</u> agreement continued to
occur inconsistently through the ages of 5 and 6 years. In Spanish, however,
<u>subject-verb</u> agreement was established around the age of 3 years. Another apparent
difference in the development of English and Spanish with this group of bilingual
children was the omission of the copula in English. In Spanish, the copula was
almost never omitted. Both of these differences can be reasonably explained by
the fact that in Spanish the verb carries a greater functional load than in English.
Since the inflected verb in Spanish indicates "specific" person as well as tense,
communication can be hampered by the non-conforming use of inflections. The
importance of the verb is magnified by the fact that Spanish permits deletion of
the subject within an utterance. For these reasons, it is vital for communication
that children begin to manipulate appropriate <u>subject-verb</u> agreement in Spanish
at an early age, which is apparently precisely what they do. Since the subject
is frequently deleted in Spanish, leaving the verb to indicate the subject, it
is understandable why copula deletion was not observed. In the few cases where
copula-deletion was observed in Spanish, the subject was expressed, yielding a
syntactic pattern identical to the type generally observed in English utterances
exhibiting copula-deletion (i.e., subject-copula deleted-predicative complement).

Other differences occurred between English and Spanish which do not lend themselves to comparison because they stem from aspects in which English and Spanish are not comparable. For example, confusion occurred in Spanish in the use of the direct and indirect object pronouns in the third person (i.e., le-lo/ les-los confusion). There was no comparable confusion in English. Similarly, the frequent and early appearance of the reflexive in Spanish was not apparent in English, due to the very different uses of the reflexive found in English and Spanish. Gender agreement in Spanish, which tended to be inconsistent, had no comparable tendency in English. Likewise, the development of the command was not comparable in English and Spanish, due to the great differences between command forms in the two languages. Similarly, do-insertion development, a phenomenon of English, had no counterpart in Spanish.

Two phenomena occurred in both English and Spanish which were considered in the present paper under the rubric of semantics and pragmatics. One was the construction of sentences which relied upon the existence of previously established linguistic data. For example, a child might say: "That is my house" to which the examiner might respond, "What?" and the child would reply: "My house."

    a. Examiner: Yeah, there's Goofy's feet; there's his arms.
        Child: And his, his legs.

    b. Examiner: Yo voy a hacer una puente.
        Child: Sí, aquí va.

In both English and Spanish, the addition of new information by the child began to appear during the second developmental stage, (i.e., around the age of three years). It is significant in that it demonstrates the child's involvement in the act of communication, with its complex interaction of subject, context and inter-locutors: all beginning at an early age. Besides the occurrence of this very social type of speech, many instances of egocentric speech were observed, such

as the juxtaposition of sentences or phrases without indication of the relation-ships between them. It is interesting to note that the egocentric speech is in full accord with Piaget's first stage of language/thought development: the egocentric stage which lasts until about the age of seven or eight (Piaget 1959). On the other hand, the social involvement indicated in the "addition of new infor-mation" suggests a good deal of linguistic sociability at an earlier age than indicated by Piaget. The other phenomenon of "semantics and pragmatics" which occurred in both English and Spanish was focus, i.e., the highlighting of the subject of a sentence by reiterating it after a slight pause at the end of the utter-ance. The precise significance of focusing is not at all clear. Further investigation of its occurrence in the speech of both children and adults is necessary before any assertions can be made. However, the fact that focus occurred in both English and Spanish suggests that it may merit further study.

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[1]It should be noted that the use of subject-verb inversion in affirmative/negative (i.e., yes/no) questions differs slightly in English and Spanish. Subject-verb inversion is more frequent in English than in Spanish for two reasons. One is that a declarative structure plus rising intonation is more commonly used in Spanish than in English for yes/no questions. The second reason is that since the subject is often deleted in Spanish, what might have been manifested as subject-verb inversion simply emerges as a verb only or a verb-object structure, with rising intonation. These reasons suggest an explanation for the slightly greater occurrence of subject-verb inversion questions noted more in English than in Spanish among the children in this study.

Suggestions for Further Research

First of all, the cross-sectional design used here has provided a large amount of information regarding the language development of bilingual children. Further research using a longitudinal design would add to this information by providing a more continuous picture of bilingual language acquisition.

Secondly, it would be of major import to observe the monolingual language development of an equal number of English-speaking and Spanish-speaking children for comparison with the information presented here on the acquisition of English and Spanish among bilingual children.

Third, psycholinguistic research has begun to recognize the importance of understanding the semantic bases of language. Although the language samples of these children were generally analyzed in terms of their structural forms, it would be of interest to reanalyze the data giving greater attention to semantic development in bilingual children.

Finally, there is a need to observe bilingual children as they interact verbally with their peers, siblings, and other members of their language community. The structural design for obtaining language samples in this study was limited to one type of interaction, the child-experimenter interaction. In order to observe the child's total communicative ability and development, it would be necessary to obtain language samples from a variety of contexts.

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Appendix A

In order to obtain children for this study, personnel in schools, churches, day care centers, community liaison positions, Mexican American Adult groups, and City and County Housing Projects were contacted. From these contacts, the names, addresses, and phone numbers, if available, of 350-400 Mexican American families with children between the ages of two and seven years of age were obtained. Initially, a letter of introduction, written in both Spanish and English, was sent to many families. After waiting a few days to make sure the letters were received, the families were then contacted by phone to determine if there were any bilingual preschool children in the home. If the parents indicated over the phone that there was a bilingual child, a personal interview was conducted in the home. During the interview, the parents were asked questions from a five-part questionnaire which included the following sections: 1) subject selection criteria; 2) child history; 3) parent history; 4) sibling history; 5) the child's interaction within his total speaking environment. At this time, also, the child was observed to see if he was able to speak both Spanish and English.

The purpose of the questionnaire was to tap, to some degree, the environment in which the child learned and used language. The criteria section included questions concerning the degree of language input (i.e., none, some, half, most, all) of both Spanish and English to the child. The parents were asked to estimate how much Spanish or English the child heard in his environment. Also included in this section were questions regarding the degree of language output (i.e., none, some, half, most, all) of both Spanish and English. As with the questions on input, the parents estimated how much Spanish and English the child used in his total speaking environment.

The child history section of the questionnaire included questions concerning the child's birth information (e.g., birth date, birthplace, birth rank), language development (e.g. which language(s) was learned first), and education (e.g. which school, if any, and whether or not the child attended a bilingual program).

In the sibling history section, there were questions concerning the education (i.e., monolingual or bilingual programs), and language development (i.e., mono-lingual or bilingual) of the brothers and sisters of the child. The parent history section included questions about the birthplace of the parents and whether the parents were bilingual or monolingual. Finally, the questionnaire included a section regarding the child's language interaction with all of the language users in his environment. The parents again were asked to estimate how much Spanish or how much English the child heard or used with other people in his environment (e.g., friends, relatives, strangers, etc.).

The children's characteristics were based on information supplied by the parents to the questionnaires. Of the 19 children, 11 were males and 8 were females. All of the chronological age groups (i.e. 2, 3, 4, 5, 6) consisted of both males and females. That is, each age group had at least one male and one female. All of the children's fathers were born in Mexico. Four of the mothers were born in the United States. However, the parents of those four mothers were born in Mexico. The rest of the mothers were born in Mexico. For 12 of the children both Spanish and English were used from the time language production began. For the remaining 7 children, Spanish was acquired first, then English. It is interesting to note that none of the children acquired English as a first language.

Parents of 17 of the children reported that their child heard Spanish half of the time and English half of the time. Of the two remaining children, parents

reported that "some" English, but "mostly" Spanish was heard. Considering the use of Spanish and English, parents of 16 of the children reported the production of half Spanish and half English. Parents of two other children reported the use of "some" Spanish, but "mostly" English, while one child's parents reported the use of "some" English, but "mostly" Spanish.

Regarding the child's interaction with all of the language users in his environment, six of the children spoke half English and half Spanish; two spoke "mostly" Spanish with "some" English; and 11 spoke all Spanish to their mothers. None of the children spoke all English to their mothers. With the fathers, two children spoke half English and half Spanish; two children spoke "mostly" Spanish with "some" English; 11 children spoke all Spanish; and one child spoke all English.

The pattern of parental language use with the child was somewhat different. Six mothers reported the use of half Spanish and half English with their children; four reported the use of "mostly" Spanish with "some" English; eight reported the use of all Spanish; while only one reported the use of all English. Of the fathers' use of language to their children, 12 fathers said they used all Spanish; four used "mostly" Spanish but "some" English; two used half English and half Spanish; while one father said that only English was spoken to the child.

Of the eight children with younger siblings, one child used half English and half Spanish; one used all English; while six used all Spanish. On the other hand, seven of the younger siblings spoke "mostly" Spanish to the child, while only one younger sibling spoke only English to the child. Regarding the 15 children with older siblings, 13 spoke half English and half Spanish to the older siblings, while one child used all English and one child used all Spanish with the older siblings. The speech of the older siblings to the children was the same as the subjects use of language with the older siblings.

Ten subjects were reported to have used half English and half Spanish with their friends. Two parents stated that only Spanish was used, while four parents reported that all English was used with friends. Regarding the use of language between the child's friends and the child during peer interaction, parents reported that: to 11 of the children, the friends spoke half English and half Spanish; to one child the friends spoke only Spanish; and to five of the children, the friends spoke only English. Parents consistently stated that the child would communicate differently depending on the language use of the child's particular friend. That is, if the friend spoke Spanish, so did the child or if the friend spoke English, so did the child.

Appendix B

Suggestions for Analysis Write Up
English

Please <u>do not write that a child has not acquired something</u>, especially with the younger children. That is, do not talk about something as absent, because we did not take enough language samples to make a definitive statement about what a child doesn't have. You might say something like: "At ____ years the first appearance of the copula was noted..."

1. One to two paragraph summary of information about your particular age group.

   a. general tendency to combine as much information as possible into one sentence.

   b. use of minimal but functional information.

2. HORIZONTAL DEVELOPMENT - Strategies (general information)

   a. declarative statements (e.g., word order, general appearance)

   b. questions (wh-, yes/no, tag, verification--do insertion, subject-verb inversion)

   c. negative (double negative, no + verb, place of negative, use of other negative forms)

   d. commands

3. VERTICAL DEVELOPMENT - Content

   a. subject-verb agreement, gender and number agreement

   b. verbs and tenses

   c. copula

   d. overgeneralizations (verb, count nouns, "he's gots, where's goes"

e. modifiers

f. pronouns

g. articles

h. possession

i. self corrections

4. CLAUSES - conjoining of the Horizontal and Vertical Development

   a. adverbial - "I like it where it is."

   b. nominal - "I believe that it hurt."

   c. relative - "The boy who went with us is there."

   d. for/to, to/to complements - "I'm going to go to the store."
   "It is necessary for her to use it."

5. SEMANTICS AND PRAGMATICS

   a. focus

   b. cause - effect

   c. the providing of new information while deleting old information in response to a question or a statement.

   d. verb confusion (e.g., see for look, put for gave, etc,)

Suggestions for Analysis Write Up
Spanish

1. Summary short paragraph including, for example, the principal of least effort, horizontal versus vertical development (syntax first, then morphology), etc.

2. Strategy (primary categories)

   a. declarative - e.g., word order, richness variety

   b. negatives - no + verb; double negative

   c. commands - affirmative, negative with object pronouns, etc.

   d. questions

3. Content (secondary categories)

   a. subject/verb agreement

   b. adjective/modifier agreement, determiner/noun agreement

   c. object pronouns - lo/le confusion; omission of lo or le; agreement with antecedent

   d. overgeneralizations

   e. conjunctions

4. Semantics and pragmatics

   a. focus

   b. self-correction (semantics-grammar)

   c. adding information

   d. semantic distinction confusion: ver/mirar

   e. clauses - adverbial, adjectival, nominal complement

5. Clauses

   a. adverbial clause: Cuando estoy mala, no voy a la playa.
      Lo hago como tu lo hiciste.

b. adjectival (relative): <u>El elefante que hício pipi estaba llorando.</u>
<u>El hombre que vino aca es mi primo.</u>

c. nominal: <u>No me gustan las que están quemadas.</u>
<u>Creo que se fue.</u>

d. complement: Me deja jugar con la de ella.

LANGUAGE INTERACTION

1. MIXED UTTERANCES

   a. as lexical items

2. CONTRASTIVE ANALYSIS

   a. pronouns in English seem to be fine once they appear, but some problems
   in Spanish (e.g., <u>le/lo</u> confusion, reflexive pronouns, etc.)

   b. the copula in English seems to present some problems when first learned
   (e.g., using it inconsistently), but no problem with these forms of the
   verb "to be" in Spanish

   c. <u>ser/estar</u> always used correctly, but problems with other verbs (e.g.,
   <u>mirar-ver</u>, general misuse of poner, look-see, say-tell, etc.)

REMEMBER: Do not assume that the child has left something out, deleted it, or that
it is absent. We don't know, so try to avoid the useage of those expressions.