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Bilingual Acquisition in Kaqchikel Maya Children and its Implications for the Teaching of Indigenous Languages

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1. Introduction

The Kaqchikel¹ Mayas reside in Guatemala, which is one of the few countries in the western hemisphere with an indigenous majority. The Mayas, including the Kaqchikel Mayas, account for about 53 percent of the population. Of this 53 percent, 2 1/2 million Mayas speak approximately twenty Mayan languages. The type of language contact situation that exists in Guatemala resulted from Spanish colonial expansion, which subordinated and continues to subordinate the Mayan languages to the Spanish language. As a result, the linguistic range of the Mayan communities includes Mayan monolingualism, various types of multilingualism, as well as Spanish monolingualism. Shift toward Spanish monolingualism, which is a threat to the survival of the Mayan languages, has been occurring mostly due to socioeconomic reasons. There is ample evidence that the shift toward Spanish monolingualism is an economic survival strategy. Some parents choose not to use their Mayan languages and transmit only the prestigious language to their children, so that the children have economic success. Moreover, young people and children refuse to communicate in the indigenous language due to competence problems and sociolinguistic pressures.

I suggest that the promotion of bilingualism can be an important linguistic strategy for the survival of the Mayan languages. In order to make it an effective strategy for linguistic survival, it is essential that we have a better understanding of the levels of bilingual knowledge attained by children and young people, for if they feel that they know their indigenous language well, they are more likely to transmit it to the next generations. The present paper recaptures the results of an assessment of language acquisition and grammatical knowledge of Kaqchikel Maya children – in particular, the knowledge of those children who have acquired Kaqchikel Maya (L1) at home, and Spanish (L2) at school. It also points out implications that these results have for teachers of indigenous languages and makes suggestions for strengthening vocabulary and knowledge of verb morphology through act-out and picture description tasks.

¹ The Academy of Mayan Languages of Guatemala (ALMG) has replaced the old written form *Cakchikel* with the new form *Kaqchikel*.

2. Determining Bilingual Competence

Mackey (2000) proposed that to determine mastery of a bilingual, it is necessary to test knowledge of the phonology, grammar, vocabulary, semantics, and stylistics of each language in the areas of comprehension, production, reading, and writing. He had in mind the ‘ideal’ bilingual, who comprehends, produces, reads, and writes in both languages. However, bilinguals in many indigenous communities are not provided the opportunity to develop their reading and writing skills in their indigenous languages. The Mayas in Guatemala as a whole have not been able to develop writing and reading skills in their native languages. In addition, Mayan-Spanish bilinguals can speak in both languages, but generally do not read or write in the Mayan language, and may not read or write in Spanish either. For this reason, the study presented here was conducted to test the bilingual children’s knowledge of grammar only in the area of oral production.

Specifically, I tested the knowledge of lexical items, particularly of nouns that refer to concrete objects. I also tested morphological and syntactic knowledge of the transitive verb to determine their levels of acquisition in Kaqchikel and Spanish. The motivation behind the choice of the transitive verb was twofold: (1) it is the nucleus around which sentences are built, and (2) the structure of the transitive verb differs sharply between the languages in that Kaqchikel is an absolutive-ergative language and Spanish is a nominative-accusative language.

2.1. Bilingualism and the Children Who Participated in this Study

The eight children who participated in this study acquired their Mayan language at home and learned Spanish in school. Hamers and Blanc (1989) have classified this pattern of bilingual acquisition as consecutive bilingualism. Thus, the children who participated in the study are consecutive bilinguals whose L2 was introduced before the age of 10;00. The children are from Tecpán, Guatemala and they acquired the Mayan language known as Kaqchikel, whose speakers number approximately half a million. Table (1) below lists the name of each child, her or his age, and the number of years in school.

(1)

Child	Age	Years in School
Kot	8;02	3
Yaxum	8;03	2
Säqche' ²	8;00	2
María Angélica	9;00	2
Ervin	9;10	2
Tojil	9;05	4
Ixb'alam	9;08	4
Ixmukane	10;10	6

² The Kaqchikel alphabet, proposed by the Academy of Mayan Languages of Guatemala (ALMG), uses the symbol ['] to represent the glottal stop or to represent glottalized consonants.

The patterns of language use in the families varied; however, one commonality among the parents was that they had made the conscious decision to speak to their children in Kaqchikel. Nevertheless, the Spanish language was present through television and radio programming. Of the eight children, only María Angélica had no access to these types of programming. However, her mother reported that whenever her sister visits them from the capital city, she speaks to them only in Spanish. Regarding the children's first school experiences, one child reported to have suffered through the transition of starting school in an unknown language, i.e., in Spanish. The child reported that he was ridiculed by his schoolmates at first because he did not speak Spanish, and later because of his non-native Spanish pronunciation. The other children said that they felt a little strange and did not understand the teacher at the beginning, but that they learned quickly.

3. Methodology

I adopted the tasks of picture naming, picture description, and acting-out for this study. I consider these tasks as being various instances of the elicited production method. This is a method designed to reveal the grammars of children by having them produce particular structures. According to Thornton (1996), the elicited production method has two advantages. First, it reveals the child's grammar without the need to make inferences from "yes" and "no" responses, as is necessary in a judgment task. Second, the experimenter can control the meaning that is to be associated with the targeted utterance. Furthermore, Thornton pointed out that such resulting data reveals what children "*do say*", and if the correct controls are included along with this technique, "they also reveal what children *cannot say*" (1996:78).

Picture naming is a decoding task that has been amply employed and researched (Snodgrass 1993). According to Hochberg and Brooks (1962), children as young as two can perform this task fairly reliably, even without access to pictorial representations. This decoding task requires that the children first make a visual recognition, and then access their semantic knowledge. Thus, the picture naming task was selected to elicit the children's bilingual knowledge of lexical items that refer to concrete objects.

Concerning the act-out task, Goodluck (1996) pointed out that this task has the following advantages: it is not intrusive, it allows subjects to volunteer their own interpretations, it is easy to administer, it is fun, and it avoids bias to a particular response. The principal motive for choosing this task for the methodology of this study was that it gives an exact indication of who does what to whom. This task was chosen to document and test the children's knowledge of the transitive verb in Kaqchikel and Spanish. The act-out tasks of this study required that the children perform specific actions or that they observe the interviewers perform specific actions, interpret those actions, and then describe those actions by answering the interviewers' questions about them. Thus, the act-out tasks along with the picture description tasks were selected to elicit the children's knowledge of the Kaqchikel and Spanish transitive verb.

4. The Assessment of the Lexical Ability of Kaqchikel Maya Children

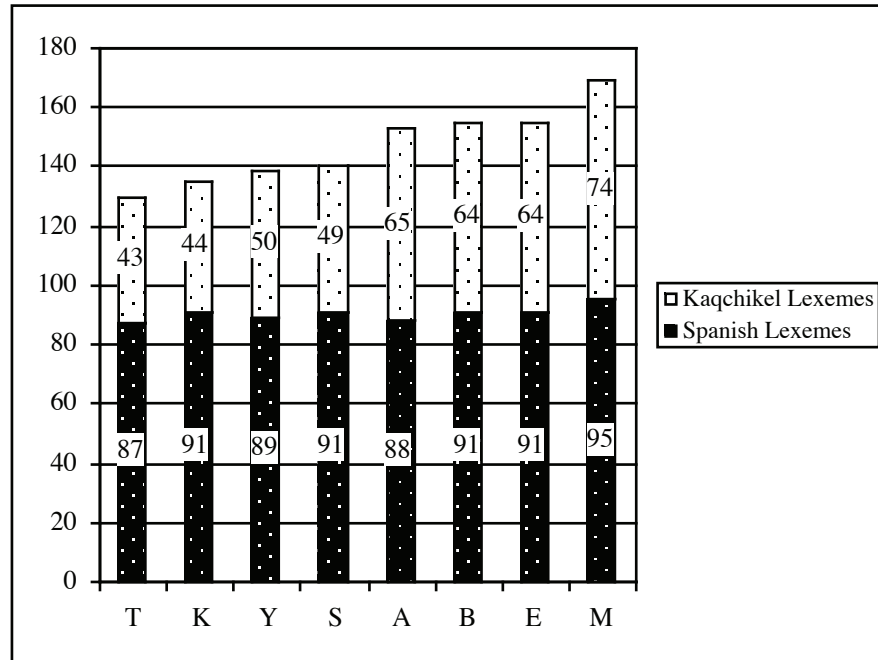
One hundred drawings, pictures, and objects were selected to test how balanced the children's lexicons (vocabularies) were. Most of the items presented to the children formed part of their cultural and natural environment. Some of the ideas to represent objects of the Kaqchikel Maya culture were borrowed from a textbook that the Mayan Language Academy (1994) published for the purpose of teaching reading and writing to Kaqchikel Mayas. Also, *core* and *noncore* lexical items were selected to test lexical ability. The concept of *core* lexical items was proposed to account for the fact that certain lexical items are subject to lexical borrowing and interference, while others, known as *core vocabulary*, are not. Romaine (1995) proposed that body parts, numbers, personal pronouns, and conjunctions belong to the *core vocabulary*. Furthermore, Appel and Muysken (1987) suggested that items basic to society also be considered *core vocabulary*; examples include the words for *fire*, *hands*, *two*, and *daughter*.

Although the concept of a *core* and *noncore vocabulary* attempts to predict borrowing patterns in bilingual communities, the *core* vocabulary of the Kaqchikel speakers in Tecpán is permanently being impacted by the introduction of western items or objects that are named with loanwords or loan translations. Furthermore, some native terms are being replaced by loanwords; thus, Spanish loanwords are constantly being integrated and increasingly play an important role in the Kaqchikel community. For instance, numbers and colors are a focal point of Ladino-Kaqchikel Maya relations. At the market, I had opportunities to listen to Kaqchikel conversations in which the prices, colors and names of products such as *banana* and *tomato* were mentioned in Spanish. Also, all of the Kaqchikel monolingual mothers and some of the monolingual and bilingual children who were interviewed reported their ages in Spanish.

The results of the lexical assessment are listed in a graph from the lowest to the highest percentage for each language in (2). The children's names are abbreviated as follows: Kot 8;2 (K), Yaxum 8;3 (Y), Säqche' 8;00 (S), María Angélica 9;00 (A), Ervin 9;10 (E), Tojil 9;5 (T), Ixb'alam 9;8 (B), and Ixmukane 10;10 (M). In the graph, 'lexemes' is synonymous with lexical items or words.

The results graphed in (2) indicate that half of the group knew 50 percent or less of the elicited lexical items. These four children (Tojil, Kot, Yaxum, and Säqche') scored an average of 43 percent. This percentage puts their Kaqchikel vocabulary behind their Spanish one. In comparison, the other half of the group (María Angélica, Ixb'alam, Ervin, and Ixmukane) knew 60 percent or more of the Kaqchikel items. Interestingly, these two groups had in common that they knew more of the Spanish lexical items that were elicited than they did the Kaqchikel ones. All the children scored above the 80th percentile in their Spanish testing and the group's average in Spanish was 90 percent. This contrasts with their 58 percent average in Kaqchikel. As a group, the children's knowledge of the Kaqchikel vocabulary lagged behind that of Spanish. This finding is significant since they acquired Kaqchikel first and were at different levels in their acquisition of Spanish.

(2) Levels of Lexical Knowledge



Finally, the data partially substantiated Hoffmann (1991), who stated that the bilingual's lexicon is rarely twice as big as that of a monolingual. For instance, the oldest child in the group, Ixmukane, scored the highest percentages in both languages. Nevertheless, her lexicon or vocabulary is not twice as large as that of a monolingual, but is instead 69 percent larger than that of a monolingual.

5. The Kaqchikel Verb System: What do Children Need to Know?

I present in this section a brief sketch of the inflectional system of the Kaqchikel verb, which the children were tested on to determine their various levels of grammatical knowledge. Children who acquire Kaqchikel need to have acquired the knowledge that Kaqchikel has a VOS constituent order in declarative sentences and is morphologically an ergative-absolutive language. That is, it is a language that has prefixes and suffixes for the transitive and intransitive verbs. These agree with the subject of an intransitive verb or with the subject and direct object of a transitive verb. The children would also need to know the constraints for each prefix in ergative and absolutive systems; they are also known as ergative case and absolutive case.

It is a tradition in Mayan language studies to name the ergative-absolutive systems as sets. The prefix paradigm that marks ergative case in the verb of a transitive verb is known as set 'A', while the prefix paradigm that marks absolutive case in the verb of an intransitive verb is known as set 'B'. This set also marks the direct object in the transitive verb. These sets are shown in (3).

(3)	Absolutive Case	Ergative Case
	Set B	Set A
	<u>Person</u>	<u>Preconsonantal</u> <u>Prevocalic</u>
	1Sg <i>in-</i>	<i>nu-</i> <i>w-</i>
	2Sg <i>at-</i>	<i>a-</i> <i>aw-</i>
	3Sg $\emptyset$	<i>ru-</i> <i>r-, u-</i>
	1Pl <i>oj</i>	<i>qa</i> <i>-q-</i>
	2Pl <i>ix-</i>	<i>i-</i> <i>iw-</i>
	3Pl <i>e-</i>	<i>ki</i> <i>-k-</i>

Each grammatical person has a prefix in set ‘B’, except for the third person singular, which is a null prefix. In set ‘A’, most grammatical persons have one preconsonantal and one prevocalic prefix or allomorph. However, the third person singular has two prevocalic prefixes: *r-* and *u-*. The latter prefix can only be preceded by the absolutive third person singular null prefix. Some examples of verb inflections are listed in (4) and (5).

- (4) Xojrunäq. ‘She/he bothered us.’
 (5) Xinatin. ‘I bathed.’

The example in (4) shows the inflection of the third person singular ergative prefix *ru-* ‘she/he’ that marks agreement with the subject. Agreement with the first person plural direct object ‘us’ is indicated with the absolutive prefix *oj-*. Also, the prefix *x-* indicates the completion of the action, i.e., it indicates completive aspect. In (5), the prefix *in-* ‘I’ marks first person singular in absolutive case and the prefix *x-* indicates that the action has been completed.

5.1. Results of Kaqchikel Production

The results of the children’s inflection of the ergative-absolutive prefixes are presented in the graph in (10). Some of the findings regarding the inflection of Kaqchikel verbs show that the children did not inflect the absolutive prefix in third person plural to mark the direct object in the obligatory contexts, but inflected it in other contexts. The absolutive prefix *e-* ‘them’ can only be inflected to mark a plural direct object that consists of humans or animals. The example in (6) illustrates how this prefix was used in the wrong context.

- (6) Xeruya’ chuwäch mesa. ‘She/he put them (vegetables) on the table.’

The children were asked to describe a picture of a mother putting a plate of vegetables on the table. The third person singular ergative prefix *ru-* ‘she/he’ was correctly inflected on the verb to agree with the subject, which was the mother in the picture. In contrast, the third person plural prefix was incorrectly inflected to agree with a direct object that referred to vegetables. Also, note that the Spanish word *mesa* ‘table’ was borrowed.

The example in (7) shows that some of the children inflected the prefix *e-* ‘them’ to mark a third person plural direct object in the right contexts.

- (7) Yekitzüq la aq. ‘They feed the pigs.’

The sentence above describes a picture with two children who are feeding a couple of pigs. This context calls for the use of the *e-* ‘them’ absolutive prefix to mark a direct object that refers to animals. Here, the children used this prefix correctly. The third person plural ergative prefix *ki-* that marks the subject was also inflected correctly, as well as the prefix *y-*, which indicates that the action has not been completed, i.e., incomplete aspect was used accurately.

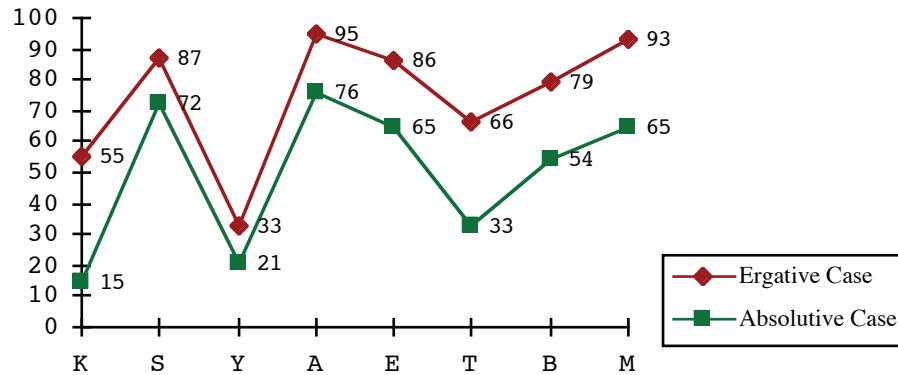
The examples in (8) and (9) show how the children misused the prevocalic absolutive prefix in 2nd person singular to mark the direct object. The ergative-absolutive prefix combination exemplified in the adult verb form *xaruq’etej* ‘she hugged you’ caused problems for 87 percent of the children. Only one child produced this verb inflection.

- (8) Xaturuq’etej. ‘She hugged you.’
 (9) Xatruq’etej. ‘She hugged you.’

In (8), the child doubled the third person singular ergative prefix with *u-* ‘she/he’ and *ru-* ‘she/he’, and inflected the absolutive prefix *at-* ‘you’. In contrast, the child who produced the example in (9) inflected the absolutive prefix *at-* ‘you’ and the ergative prefix *ru-* ‘she/he’. Hence, both girls selected the prevocalic second person singular absolutive prefix *at-* rather than the prefix *a-* used in Tecpán as a variant prefix. Nevertheless, the verb form in (9) is grammatical, whereas the verb form in (8) is not grammatical. The graph in (10) plots the results for each child in both ergative and absolutive cases. The names of the children are abbreviated in the same manner as in (2) and they are arranged from the lowest to the highest percentages.

Regarding the inflection of both the ergative and absolutive case systems, it was found that the children scored higher percentages on ergative case inflection. The 41 percent average of the children’s scores on inflecting absolutive case stands in contrast to their 70 percent average on ergative case inflection. The children’s low productivity at inflecting absolutive case was affected by their misuse and lack of use of the absolutive prefix *e-* ‘them’. Seventy-five percent of the children used a prepositional phrase to indicate the direct object rather marking it with the prefix *e-* ‘them’. Some of the children were probably still sorting out the particular semantic features of the direct objects with which the absolutive prefix *e-* ‘them’ can be inflected.

(10) The Children's Production of Ergative and Absolutive Cases



In conclusion, each child has her/his own competence configuration regarding her/his knowledge of the ergative-absolutive prefixes that are inflected on the verb. Yet, the majority of the children (62% of the group) were knowledgeable of Kaqchikel's inflectional verb system. The results indicate that María Angélica (A) was the most knowledgeable and productive at inflecting the Kaqchikel verb since she scored 95 percent in ergative case and 76 percent in absolutive case. Interestingly, she was not the youngest or oldest child in the group. In comparison, Yaxum (Y), who was 8;03, was the least knowledgeable of the Kaqchikel transitive verb. He scored 33 percent in ergative case and 21 percent in absolutive case. Perhaps he had not acquired this system well enough yet, or he was losing his knowledge of it.

6. Spanish Verb and Pronoun Systems: What do Children Need to Know?

I present in this section a brief sketch of the Spanish reflexive pronoun system, which the children were tested on – among other syntactic structures – to determine their various levels of grammatical knowledge. Kaqchikel Maya children who acquired Spanish need to know among other things that Spanish is an (S)VO language and that it is not an ergative-absolutive language, but rather that it is syntactically a nominative-accusative language. Spanish, unlike Kaqchikel, has a system of prefixes to mark agreement with the subject in the verb. It also has a system of pronouns known as *clitics* that refers to the direct object or indirect object, i.e., they indicate accusative, dative, or reflexive case.³ The table in (11) lists the reflexive pronouns of Spanish.

³ The term *clitic* is derived from a Greek word meaning 'lean on'. Clitics are not regular pronouns since they 'lean on' and attach to a verb due to their lack of regular or emphatic stress. That is, their phonological weakness causes them to undergo phonological word-formation and join a constituent that bears stress (Zagona 2002).

(11) Person and Number	Reflexive Pronouns
1sg	me
2sg	te/se
3sg	se
1pl	nos
2pl	se
3pl	se

Spanish clitics adjoin, under certain conditions, to either the left or right of the verb.⁴ The example in (12) shows the use of the third person singular clitic *me* ‘myself’, which is attached or cliticized to the left of the verb.

(12) El niño se pone el calcetín. ‘The boy puts on his sock.’

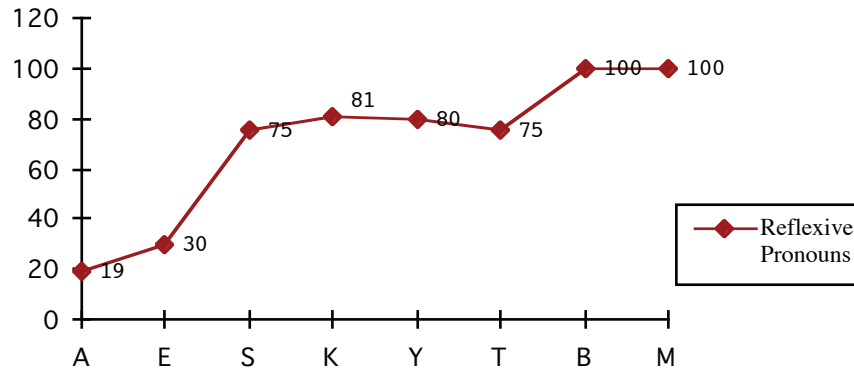
The verb *poner* ‘to put on’ has the suffix *-e*, which agrees with the subject *el niño* ‘the child’ and the reflexive pronoun *se* ‘himself’ is in enclitic position. Moreover, in a structure such as the one in (12), the noun *calcetín* ‘sock’ may be modified only with an article. Thus, the Spanish example in (12) literally says ‘(I) The boy puts on the sock himself.’ Children acquiring Spanish as a second language need to acquire the knowledge of all these grammatical aspects to correctly produce a sentence with a reflexive pronoun.

6.1. Results of Spanish Production

The children were tested on their knowledge of reflexive pronouns, as well as on their knowledge of those pronouns that refer to the direct object or indirect object. In this section, I report about the children’s knowledge of the reflexive clitics. The data demonstrate that the children’s knowledge of reflexive clitics varied and could be placed at different interlanguage levels. The number of years in school correlated with the level of knowledge that a child had of a particular structure. In other words, it was found that the more years in school the higher the score of the child; thus, some children showed to be at the beginning, intermediate, and advanced levels. The graph in (13) shows the results for each child in the production of reflexive pronouns and the names of the children are abbreviated in the same manner as in (2). The scores are also rank-listed from the lowest to the highest percentage. Ervin (E) and María Angélica (A) were found to be at the beginning interlanguage level since their average score was a low 24 percent. Tojil (T), Yaxum (Y), Kot (K), and Säqche’ (S) were placed at the intermediate level and they scored an average of 78 percent. Ixmukane (M) and Ixb’alam (B) were representative of the advanced interlanguage level and scored one hundred percent.

⁴ A clitic is said to be *proclitic* if it attaches to the right of the verb and *enclitic* if it is attached to its left. This process is technically known as *cliticization*.

(13) The Children's Production of Reflexive Pronouns



The children's acquisition of the reflexive clitics developed thorough the period they were tested. Specifically, they showed development in the acquisition of the third person singular reflexive clitic *se* 'her/himself' with the verb *poner* 'to put on'. During the first visit, I elicited this verb as well as the verb *cepillar* 'to brush'.

All of the intermediate children cliticized *se* with the verb *cepillar*, but they did not cliticize it with the verb *poner*. Interestingly, during the second visit the children produced the clitic *se* 'herself/himself' with the verb *poner*, except for one child. In comparison, the beginning children did not produce the reflexive clitic *se* 'herself/himself' with either verb. An example of the type of sentence produced by a beginning level child is illustrated in (14).

(14) El niño pone el calcetín. 'The boy puts on his (the) sock.'

The reflexive clitic *se* 'herself/himself' was not produced, which indicates that the beginning level children transferred from L1 to L2. That is, María Angélica (A) and Ervin (E) assumed that certain Spanish verbs, especially cleaning and grooming verbs, have the same properties as their Kaqchikel equivalents. The most common acquisition pattern of Säqche' (S), Kot (K), Yaxum (Y), and Tojil (T), who were classified at the beginning intermediate interlanguage level, was that they produced reflexive clitics with more consistency within a verb class and across verb classes than the children at the beginner interlanguage level. Thus, in order to acquire the Spanish reflexive clitic system, it is crucial that Kaqchikel-Maya children discover the reflexive properties of Spanish verbs *vis-à-vis* Kaqchikel verbs.

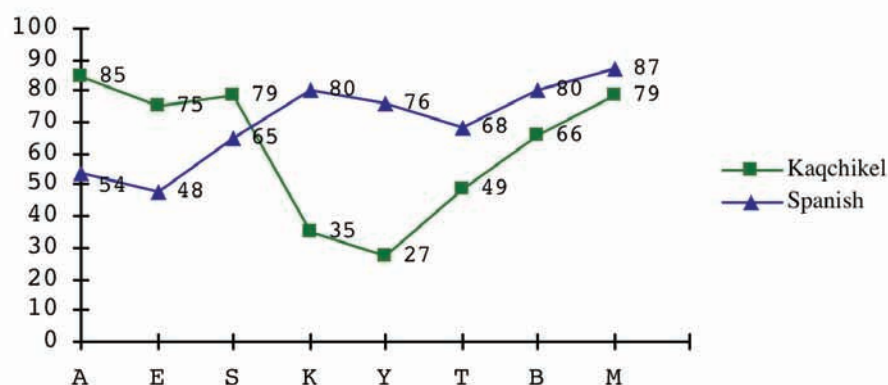
7. Levels of Bilingualism

This section addresses the issue of bilingual competence and whether the children in this study have achieved 'balanced bilingualism', which I assume is the sum of

the competence in the Kaqchikel and Spanish languages. However, I suggest that this competence should not be compared to monolingual standards. Monolingual standards can provide a point of reference, but the competence of the bilingual is not equal to the competence of a Kaqchikel monolingual and a Spanish monolingual. For this study, these levels of competence are based on knowledge of lexical equivalents, Kaqchikel ergative and absolutive inflection on transitive verbs, and the verbal agreement and clitics of the Spanish transitive verbs.

In (15), a graph plots the scores of the children in both languages. The results have been rank-listed from the highest to the lowest average percentage in Spanish. The Kaqchikel percentages are based on averages for both ergative and absolutive prefix production. The line that plots these average scores starts at 85 percent with María Angélica (A), but this line steadily drops to 27 percent with Yaxum (Y). These two children represent the highest level and the lowest level of Kaqchikel competence in the group.

(15) The Children's Results for Both Languages



The graph above shows that María Angélica (A), Săqche' (S), and Ervin (E), i.e., 37% of the group, had configurations that identified them as Kaqchikel dominant bilinguals; they had the highest average percentages in Kaqchikel and the lowest percentages in Spanish. Tojil (T), Kot, (K), and Yaxum (Y) had configurations that classified them as Spanish dominant bilinguals since they had averages in Kaqchikel that ranged from 27 to 49 percent, and these were the lowest Kaqchikel scores of the group. In contrast, they scored among the highest Spanish percentages, ranging from 68 to 80 percent.

The scores of Ixb'alam (B) were lower than that of Ixmukane (M), and her configuration in the two languages had not reached a state of equilibrium. Although she scored an average of 66 percent in Kaqchikel and 80 percent in Spanish, her knowledge of Spanish was higher than that of Kaqchikel by 14 percent. This indicates that her bilingualism was tipping slightly toward Spanish dominance.

Ixmukane (M) had not reached one hundred percent competence in Kaqchikel and Spanish, nor was she equally competent in these languages. Nevertheless, she had reached a state of equilibrium in her levels of competence in both languages. Her Spanish and Kaqchikel averages were 87 and 79 percent, respectively. Her scores in Spanish were the highest of the group, but not that of Kaqchikel, which might indicate that her Spanish has set back her complete development of Kaqchikel. Nevertheless, the results of Ixmukane did not vary as much as with the other children. Hence, she, the oldest child, had reached the most stable state of equilibrium within the group.

8. Conclusions and Implications for Teachers of Indigenous Languages

The results of this study indicate that to expect 100% balanced bilingualism in Kaqchikel Maya children is impractical. Nevertheless, I suggest that the levels of knowledge reached by Ixmukane, the oldest child of the group, are representative of the type of balanced bilingualism that researchers and language teachers should expect of consecutive bilinguals whose sociolinguistic conditions subordinate their indigenous languages to Spanish. Ixmukane scored 79 percent in Kaqchikel and 87 percent in Spanish, i.e., her Kaqchikel lagged behind Spanish by 8 percent. One might say that for Kaqchikel Maya communities such as the one in Tecpán, balanced bilingualism means to have reached a level of equilibrium in which the indigenous language falls behind the prestigious one.

A major finding of the study is that those children who were classified as Spanish dominant showed signs of language loss. That is, these children's vocabularies in Kaqchikel were smaller than those of Spanish and they had problems conjugating the Kaqchikel transitive verb. I suggest that for these children, Spanish dominance means the loss of the Kaqchikel language. Thus, verb inflection should be practiced and encouraged for the development and maintenance of the indigenous language in this type of consecutive bilingual.

It was also found that the Spanish interlanguage levels of the children reflect their number of years in school. The children who had been in school the longest had acquired, although not perfectly, the Spanish grammatical structures that were tested. Another related and important finding was that if the child started school late, say at the age of 8, she or he had more opportunity to acquire and develop some of the important verbal structures of Kaqchikel. In other words, if the introduction of Spanish is delayed, the child has more probabilities to fully develop and maintain her/his native language.

I suggest that in the design of curricula for these consecutive bilinguals, special attention must be placed in the grammatical areas where the languages contrast. I propose that the methodology used to test the children's knowledge of Kaqchikel and Spanish can be used as teaching methods for the strengthening of vocabulary and verb morphology in the indigenous language of the child. Through the tasks of picture naming, picture description, and acting-out, children can be taught essential aspects of the languages they are acquiring. These methods are not intrusive, are entertaining, and can be easily integrated into a curriculum.

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REPORT 14

**SURVEY OF CALIFORNIA AND
OTHER INDIAN LANGUAGES**

Language is Life
***PROCEEDINGS OF THE 11TH ANNUAL
STABILIZING INDIGENOUS LANGUAGES CONFERENCE***

June 10-13, 2004
University of California at Berkeley

Wesley Y. Leonard and Stelómethet Ethel B. Gardner, Editors

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