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The cross-linguistic study of bilingual development

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Proficiency, choice and attitudes in bilingual Mexican-American children¹

The United States is home to native speakers of practically every major language of the world, yet the rate at which immigrants have shifted from their native language to English has given it the reputation of a monolingual English-speaking country with severely limited competence in other languages. In many ways, California, where this study was conducted, is an intensified version of the language minority picture of the United States (most language minority students are concentrated in just five large states: New York, Texas, California, Illinois, and Florida).

¹ Assistants to the project include: Carola Cabrejos, Yuri Kuwahara, James Rodriguez, Griselda Silva, David Whitenack and Adam Winsler.

Table 1. Number of limited and fluent-English-proficient students in California Public Schools, by Language, 1990. Source: California State Department of Education.

Language	Limited-English- proficient students	Fluent-English- proficient students	Total
Spanish	655,097	408,280	1,063,377
Vietnamese	34,934	27,681	62,615
Pilipino	16,338	35,135	51,473
Cantonese	21,154	23,113	44,267
Korean			
	13,389	20,178	33,567
Cambodian	19,234	5,243	24,477
łmong	18,091	3,824	21,915
Mandarin	7,201	13,257	20,458
ao	12,177	4,275	16,452
rmenian	9,046	3,021	12,067
apanese	5,505	6,541	12,046
arsi	4,875	7,041	11,916
Other Chinese	3,293	4,220	7,513
ortuguese	2,830	4,601	7,431
vrabic .	2,771	3,248	6,019
Punjabi	2,093	2,161	. 4,254
lindi	1,754	1,892	3,646
dien	2,834	508	3,342
amoan	1,490	1,842	3,332
ocano	1,041	1,468	2,509
ebrew	904	i	
ussian		1,399	2,303
ussian Thai	1,510	669	2,179
	852	985	1,837
ongan	956	610	1,566
aiwanese	560	899	1,459
ther Filipino	584	853	1,437
umanian	820	504	1,324
ierman	307	956	1,263
ujarati	501	705	1,206
rdu	396	413	809
rench	265	539	804
ssyrian	415	384	799
alian	153	443	596
ashto	375	128	503
olish	247	201	448
ndonesian	295	152	447
reek	103	310	413
isayan	148	130	278
ungarian	99	103	202
outch	58	103	. 180
uamanian	1		
urmese	48	123	171
roatian	79	85	164
ative American	30	125	155
	61	85	146
urkish erbian	27	41	68
	13	22	35
II other languages	16,578	32,990	49,568
tate totals	861,531	621,505	1,483,036
ercent	58.0%	42.0%	100.0%

The robustness of linguistic diversity in the United States is captured quite well in some recent statistics compiled in the State of California by the Department of Education. Table 1 makes three points. First, there is a very large number (1,483,036 to be exact) of language minority students, defined as those in whose home a language other than English is spoken. Second, there is a large range of languages represented. And third, Spanish represents by far the largest group, accounting for about 72 per cent of the total language minority population.

The magnitude of the language minority population has intensified the politicization of language issues, as witnessed in the 'English-only movement' as well as the backlash against bilingual education programs (Crawford, 1992). Some have charged that unlike previous immigrant groups, Hispanics have refused to assimilate and have hung on to their ethnic language and heritage (Epstein, 1977). In countering such charges, some Hispanic leaders have pointed to demographic data showing that Spanish-speaking immigrants shift to English at a rapid rate, for example, that 'more than half the immigrants who arrived in the United States before they were fourteen have made English their usual, everyday language, relegating Spanish to the status of a second language' (Nicolau & Valdivieso, 1992: 319).

Indeed, ethnographic information (e.g., Mallory, 1971; Ortiz, 1975) as well as large-scale demographic studies (Fishman, 1966; Lopez, 1978; Veltman, 1983, 1988) suggest that bilingual individuals show a strong preference for English in many conversational situations, and that this preference is translated into a monolingual English upbringing for their offspring.

The shift from the non-English language to English that occurs may be both intra-individual and inter-generational in nature, i.e., individuals during the course of their lifetime shift their choice of primary language use from their native ethnic language to English, and ethnolinguistic communities in successive generations will likewise shift in their linguistic preference.

Although there is widespread agreement about the fact that this shift occurs rapidly, our understanding of the process is quite limited. This weakness is due to the fact that most of the studies of language shift have been inter-generational studies using available archival and census data on self-reported language preference. At present, our understanding of language shift is hampered by a number of problems.

First, most studies refer to a shift in language choice and do not directly address its relationship to language proficiency. Individuals may indeed choose not to use their native language, but that does not necessarily mean that they have lost proficiency in the language. In the limit, of course, the choice not to use the ethnic language by individuals translates into the loss of the language through its non-acquisition by their offspring. However, an important piece of information on how choice and proficiency are interrelated within an individual is missing.

Second, there are few detailed studies of the psycholinguistic nature of language attrition in language minority populations. Most studies have focused almost exclusively on the loss of a foreign language (e.g., Bahrick, 1984; Cohen, 1975; Gardner, Lalonde & MacPherson, 1985; Lett & O'Mara (forthcoming); Lett, personal

communication; Weltens, van Els & Schils, 1989). Where loss of the native language has been investigated, the subjects have been young children where it is difficult to distinguish between *language attrition* and *incomplete acquisition* (Kaufman & Aronoff (forthcoming) a, b; Merino, 1983; Smith, 1983; Weltens, de Bot & van Els, 1986).

Third, the studies conducted with large samples have based their findings on self-reported measures of language choice and language proficiency. (Gumperz, 1982; Blom & Gumperz, 1972) points out the limitations of self-reported data in matters of language *choice*, especially when the questions are phrased in general terms, such as asking what language is typically used in the home or at church. Self-reported language *proficiency* data also carry obvious measurement problems.

Measurement of language shift² has at least three components that should be measured separately: (1) an individual's actual proficiency in the two languages, (2) an individual's choice to use differential amounts of the languages (in different discourse settings) given threshold proficiency in the languages, and (3) an individual's attitudes toward the languages. These components are in principle separable (i.e., there may be an individual with high proficiency in both English and Spanish who chooses to use mostly English, but maintains an identity that is primarily Mexican), but in reality they are probably related. For example, Veltman focuses on language choice over language proficiency, not just because the census bureau questions have tended to ask the question on usual language practice (e.g., 'What language does (this person) usually speak?' in the Survey of Income and Education, 1976), but also because he considers it a logical outcome that if a language is not usually spoken in the home, the children will not develop proficiency in it.

In addition to distinguishing between these components of language shift, it is important to ask whether the data are based on self-report or on direct observation. For example, the High School and Beyond survey asked 'How well do you speak that language?' with response choices very well, pretty well, not very well, and not at all. How accurate would this self-report be when compared with direct observation of proficiency in the language? Obviously, self-reported data are the easiest to obtain, but they sacrifice objectivity; however, in some cases, direct observation may be extremely difficult or impractical, such as in the case of language identification.

The rough measurement model in the study of language shift, then, can be thought of as a 2x3 table as follows:

² The empirical basis for these claims are explored further in Hakuta (forthcoming).

Table 2. Constructs and data types used to study language shift.

	Type of Data		
Aspect of Bilingualism	Self-Report	Observation	
Language Proficiency	1	2	
Language Choice	3	4	
Language Attitudes	5	6	

In an ideal situation, one would look at the correlations between 2, 4, and 6 based on actual observations. However, we are often dependent on self-report and other indirect means of inference.

With this picture about measurement in mind, we would like to offer a characterization of pilot work we have been conducting over the past few years looking at language maintenance and shift among Mexican background minority school-aged children and youths in two communities in the northern part of California near San Francisco.

One community, Watsonville, is located in an agricultural area known as the Central Coast. The subjects in this study were students at a single, four-year, high school, of which 65 per cent (about 1500) are of Mexican descent. Having arrived from other areas of California, other states in the US and directly from different states of Mexico, the vast majority of the Mexican-descent population have settled in this area in the last 20 years (Donato, 1988).

The second community is located in the suburban area of San Francisco, to which we have given the pseudonym Eastside. Like many communities in Northern California, Eastside has become increasingly more diverse with regards to income and ethnicity. In the mid 1960s, the community was populated mostly by working class Anglos; now it is home to immigrants from southern Europe, the Pacific Islands, and Latin America. Among these groups, immigrants from Mexico are the most numerous and along with other Latinos represent more than 80 per cent of the school age population in the four Eastside elementary schools. Figure 1 shows the increase in Hispanic students in Eastside schools over the years 1964-1990.

The Watsonville study

The study of high school students was conducted primarily using paper-and-pencil instruments. The major goal of the study was to look at language proficiency (both observed and self-reported), language attitude (self-report), and language choice (self-report) as a function of immigration background. Since the results have already been published in Applied Linguistics (1992, Vol. 13), only a brief outline of the findings will be provided here.

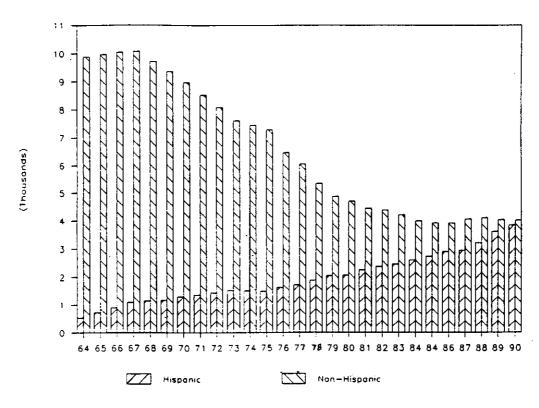


Figure 1. Changes in percentages of Hispanic and Non-Hispanic students in East-side, California Public Schools, over the years 1964-1990.

Subjects in the study were divided into six groups:

- 1. Born in Mexico, arrived in the USA older than 10 years old.
- 2. Born in Mexico, arrived in the USA between the ages of 6 and 10 years old inclusively.
- 3. Born in Mexico, arrived in the USA when 5 years old or younger.
- 4. Born in the USA, both parents born in Mexico.
- 5. Born in the USA, at least one parent born in the USA.
- 6. Born in the USA, at least one parent and associated grandparents born in the USA.

One major result of the analysis was the importance of distinguishing between language proficiency from language choice – in many ways as different a set of realities as the worlds of psycholinguists from sociolinguists – for very different pictures of language shift emerged.

With respect to proficiency, the main findings for English and Spanish proficiency can be seen in Figure 2. For English, it shows that the only notable difference is between groups 1 and 2, i.e., the most recent arrivals have not yet mastered English as well as the other groups; for Spanish it shows that maintenance of Spanish is strong until the drop at Group 5.

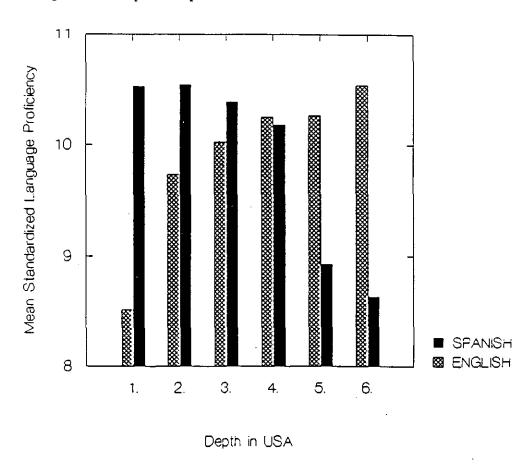


Figure 2. Mean Standardized Spanish and English language proficiency measures for six Depth cohorts. (Depth 1: Born in Mexico, arrived in the USA > 10 years old; Depth 2: Born in Mexico, arrived in the USA between the ages of 6 and 10 years old inclusively; Depth 3: Born in Mexico, arrived in the USA when 5 years old or younger; Depth 4: Born in the USA, both parents born in Mexico; Depth 5: Born in the USA, at least one parent born in the USA, at least one parent and associated grandparents born in the USA).

On the other hand, with respect to language choice, rather than the discontinuous appearances that characterized English and Spanish proficiencies, the shift was more of a gradual one, as seen in Figure 3.

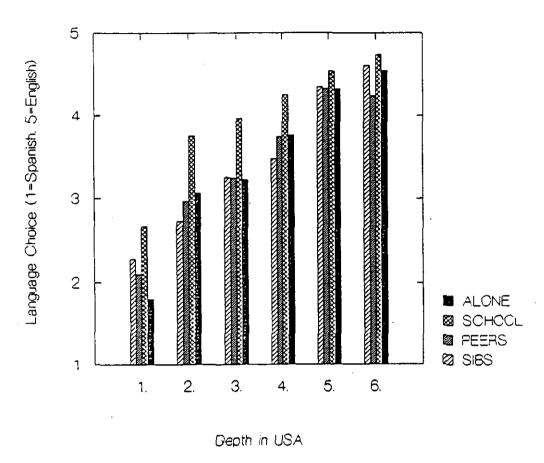


Figure 3. Language choice with siblings, with peers, for academic purposes at school, and when alone, by Depth cohorts.

Different views of shift that emerge from language proficiency and language choice are underscored in analyses of correlates of between-group and within-group differences as well. For Spanish, maintenance of proficiency in Spanish is principally associated with adult language practice in the home, rather than the subject's language attitude or language choice outside the home. That is to say, once the adults shifted into using English at home, there was little chance for Spanish to be

passed on to their offspring. English proficiency is related to language usage with peers, and is not associated with language practice in the home.

Finally, a major methodological point to emerge from the study was the importance of taking direct measurements in language proficiency rather than relying on self-report. We found that although there were sizeable correlations between actual measured proficiency and self-reported proficiency (r=.61 for Spanish, r=.46 for English), there was an almost equal contribution of the attitudinal variance component to the self-report measures. Thus, one view of self-reported proficiency measures is that they are just as good a measure of language attitude as they are of language proficiency³.

Eastside study

The Watsonville study was what might be considered a one-shot study with few provisions for in-depth exploration of the issues. We decided to collect further descriptive data, but in a different community – in which Lucinda Pease-Alvarez had conducted her dissertation research in language socialization. The study is also given character by the fact that we are focusing on both quantitative and qualitative measurements – for example, in addition to asking individuals to report their language choice, we also ask them to explain their choices. Finally, we have gone through an extensive process of sample selection by first surveying the community, defining a sampling frame, and recruiting the final sample.

Sampling

A survey of the students in the bilingual programs in the Eastside City School District was conducted starting in December, 1990. Based on the continuing work of Lucinda Pease-Alvarez in understanding the sociolinguistics of bilingualism in the schools and the Mexican-descent community in the area of Eastside (Vasquez, Pease-Alvarez & Shannon (forthcoming)), as well as data on the proportion of Hispanic students in the different schools from the district records, we identified four schools within a three-mile radius area from which to obtain our sample. The survey had two purposes. First, we wanted to identify the sample for the main study in a systematic way. And second, we wanted to obtain a broadly representative picture of language use in the community.

The survey asked for the following information: language used among adults,

³ This claim would of course be limited by the extent to which the sociolinguistic circumstances of language learning, maintenance and loss are related to attitudes and symbolism around language. In the United States, language, and especially Spanish, is charged with political symbolism.

between adults and children and among children in the house; place and date of birth for the mother, father, and all children in the house; age of immigration to the United States for the mother and father. The forms were bilingual and printed on opposite sides of a single legal size paper.

The surveys were distributed with the cooperation of all third-grade teachers in the four schools. All students in these classes with Hispanic surnames were given a survey form to take home to the parents, with instructions to return them the following day. A total of approximately 344 survey forms were distributed, of which 184 (53 per cent) were returned with completed information. About a month later, we sent a second wave of surveys to approximately 158 non-respondents, and received 49 responses. In total, then we received 233 out of an original 344 targeted respondents, for a response rate of 68 per cent. The following results are based on analyses of responses from the first wave of responses.

Grouping by immigration background

In this study, several modifications were made from the Watsonville grouping criteria, as follows:

- Group MM: Born in Mexico; parents born in Mexico.

- Group MU/A: Born in USA; parents born in Mexico, mother immigrated at

age 15 or older.

- Group MU/C: Born in USA; parents born in Mexico, mother immigrated at

age 10 or younger.

- Group UU: Born in USA; at least one parent born in USA.

Reported language use in the home is broken down by the Groups and appears in Figure 4. There are two notable features in the data. First, as early as by Group MU-A, there is an evident shift among the children towards a preference for English. And second, by Group UU, the shift to preference of English is complete, with both the adults and the children demonstrating a preference for English. This pattern is consistent with our findings from Watsonville, and also consistent with the macrosociolinguistic picture of language shift among Hispanic students suggested by demographers (e.g., Veltmann, 1983).

Siblings

In the survey, we were encouraged by a small but statistically reliable effect of sibling birth order on reported language use, t (175)=2.41, p = .017. Because this variable could represent the effect of sibling language exposure controlling for fa-

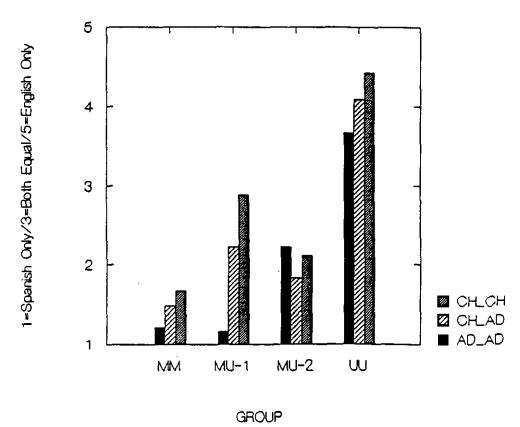


Figure 4. Reported language choice among children (CH-CH), between children and adults (CH-AD), and among adults (AD-AD) for the four different Groups.

mily, we decided to incorporate it into our sampling frame. In our sampling, we have been selecting our sample in pairs of siblings, which consist of a target child, and the sibling counterpart. The target sample will all be in the third grade, and on average be eight years old; the sibling counterparts will vary. In half of our cases, the target child is the first born, and therefore the sibling counterparts is younger. In the other half, the target child is the second born, and therefore the sibling counterparts is older. Additionally, we have constrained the sampling such that the chronological separation in each pair will be less than three years.

We can then pursue two kinds of comparisons. First, there will be a straightforward independent-samples comparison between the target first born and target second born children. The next set of comparisons will involve waiting for our subjects to mature chronologically until they can be compared with their own sibling. Thus, for the target children who are first born, we will wait until their younger sibling counterpart reaches the same age as when they (the target children) were

assessed, and then they (the younger sibling counterpart) will be assessed, and the pairs will be compared. In this comparison, the pairs will be on average 8 years old. For the target children who are second born, we will immediately assess their first-born sibling counterpart, and then wait for the target children to reach the same age as the sibling counterparts, at which time they will be assessed again. In this comparison, the pairs will be on average 10 years old. We believe that this method will provide an accurate assessment of the effect of birth order on language maintenance and shift.

Sampling for the main study

Broadly speaking, we based our data collection strategy upon two distinctions. The first is a distinction between language proficiency and language choice, as was illustrated earlier with the Watsonville data. The second distinction in our data collection process is one between bilingual performance/behaviour and bilingual knowledge/awareness.

We find it useful to cross these two distinctions as illustrated in the following table:

Table 3. Summary of data collection strategy.

	observation/ behaviour	self-report/ awareness
language proficiency	1	2
language choice	3	4

Our most systematic data collection is concentrated in Cells 1, 2, and 4.

Language proficiency/behaviour (Cell 1)

We decided to utilize both standardized language proficiency measures as well as somewhat more naturalistic elicited narratives. While neither of us are great fans of standardized language tests, we felt it necessary in order to establish comparability with other studies. For this measure, we decided on the English and Spanish versions of the Peabody Picture Vocabulary Test, which measures receptive vocabulary. There were several reasons for our choice. First, it is available in both languages in comparable form. Second, the technical manual was satisfactory. Third, it provides a wide range of possible scores since it is appropriate from ages 3 to adulthood. And fourth, it is easy to administer. Our previous experience suggests that receptive vocabulary correlates well with other types of standardized language proficiency measures.

The elicited narratives task was more engaging and involved. We introduced children to a board on which two Ninja turtles were mounted. When the child would speak to one of the turtles, the other turtle (via a sound-activated motor) would rock back and forth. Once the child became comfortable with the setup, s/he was told that the turtle (Michelangelo) had many friends in Mexico, and that they are always curious about children in the United States, in Eastside, and in their school. A green canister was then introduced, and s/he was told that the task now was to make a tape recording of some stories to put in the can and send to Michelangelo's friends in Mexico. To make it more realistic as well as entertaining, we took a polaroid picture of the child, watched it develop, and placed it in the canister.

Four Spanish prompts and one English prompt were used to elicit narratives. The Spanish prompts consisted of an autobiography, a narrative of a book about a bear, a narrative about a magnitude 7.1 earthquake that occurred in October, 1989 (or if they were not here for that exciting event, a story about the most scary thing that happened to them), and a description of a surrealistic picture of a floating bed (taken from a book by Chris van Allsburg). In the English narrative, we asked them to tell a story from a book about a mouse.

One of the reasons we chose narratives was because they would by necessity contain references to the past. Silva-Corvalán (1989) has documented temporal reference as a major feature in the shift in east Los Angeles Mexican Spanish. Thus, reference to the past is a major part of our structural analysis. We will also be looking for other grammatical and narrative features, as well as conducting analyses of lexical variety and overall proficiency.

Language proficiency/awareness (Cell 2)

An interview was constructed to assess how much the children knew about their own bilingual proficiency, and also how well they could reason and talk about specific linguistic contrasts between English and Spanish. We begin by asking them to estimate the number of words that they know in English and in Spanish. (To stimulate this, they are shown a head of a popular movie monster character, Beetlejuice, containing yellow and white ping pong balls, with English words written on the yellow and Spanish on the white balls.) They are then introduced to a game in which they are asked to think of as many words as possible that are appropriate translations of an English word. For example, starting with the word CRY, they might come up with LLORAR and GRITAR, and then from GRITAR, they would come up with SHOUT and YELL. This warm-up is intended to help them think about connections between English and Spanish.

They are then given a series of word and sentence translation tasks targeting specific English to Spanish translations in which Spanish makes finer distinctions. These include FISH = PEZ (a live fish), PESCADO (fish to be eaten); WAS = FUE (expressing temporary state), ERA (expressing enduring state); YOU = TÚ (familiar), USTED (formal); PLAYED = JUGÓ (preterite), JUGABA (imperfect). The children are asked to reason about the appropriateness of the translations.

Choice/behaviour (Cell 3)

We will not be observing the language choices of all of our subjects explicitly. However, we are obtaining estimates of their choice from their parents as well as their teachers to validate the self-reports obtained from the children. Further, we are conducting systematic observations of six subjects targeted for intensive study in both the classrooms and homes.

Choice/awareness (Cell 4)

This interview is structured to address the following questions:

- What languages do children use with their everyday interlocutors at home and school?
- What sorts of macro- and micro-sociolinguistic factors are related to their language choices?
- What kinds of attributions do children make about their language choices? What do they feel motivates their language choices with their different interlocutors at home and school?
- What sorts of attitudes do the children have towards bilingualism?
- Do they prefer one language over the other? Why?
- Do they feel that one language is more important than another? Why?

The format of the interview is quite straightforward, with the first half concentrating on language choice, and the second half on language attitudes.

Parents

The parent (usually the mother) of each subject is being interviewed. The following questions guide our interview:

- What language do parents and their children use at home?
- What factors do parents feel influence these choices?
- Do parents have a theory about bilingualism for their children?
- What is the nature of their theory?
- Do they feel that bilingualism will benefit their children?
- Are they committed to the maintenance of bilingualism in their children? Why?
- Do they feel that there is a trade-off between native-language maintenance and second language acquisition?
- Who do they feel should be responsible for their children's development of their native language?
- Who do they feel should be responsible for their children's development of their English?
- What should be the nature of this responsibility?
- Where do these theories come from?

- Have schools and teachers influenced the development of these theories? How?
- Have community and family members influenced the development of these theories? How?
- Have parents' own life experiences contributed to these theories?
- Are parents' theories consistent with the way in which they use language with their children?
- Do parents consciously act to influence the language choices and language development of their children? How?

Preliminary results

Due to the preliminary nature of our data collection and analysis efforts, the following results should still be seen as tentative at best. Our best single measure at this point for English and Spanish proficiency remains the PPVT scores, for example, and we are still in the process of validating these scores against the other interview measures. In addition, we are just beginning an exhaustive content analysis of the text data, so at this point, we can only rely on interesting examples without being able to say anything about how they are related to a broader sampling framework. The preliminary conclusions we have are as follows:

- There are increases in English proficiency and decreases in Spanish proficiency across groups. It should be noted that the sample sizes are only adequate for Groups 1 (MM) and 2 (MU/A), but the trends are already evident in the other groups as well. The difference in means between the two groups achieves statistical significance for Spanish (F[1,32]=5.58, p<.05), but not for English (F[1,32]=2.09, p=.16). This result is due to the higher variability in English for the MM group, where individual children seem to have attained a higher proficiency in English than in any other group.</p>
- The effect of birth order appears minimal for English and Spanish proficiencies. An analysis of variance reveals a marginal effect of birth order on English proficiency (F[1,36]=2.05, p=.16) and no effect on Spanish (F<1).
- The relationship between Spanish and English proficiency interacts with Group. There is a strong and positive relationship for Group MM, but no relationship for Group MU/A. One interpretation for this differential interlingual dependency is that they are related to the nature of the 'native language' in the case of the MM group, it is a native language both in the home and the cultural context, while in the MU/A group, it is a native language in the home, but its status is less secure in the larger cultural context (Lambert, 1975). Since English proficiency is primarily an indicator of the learning of academic language skills at school for these groups, the lack of correlation for the MU/A group may signal that variance in native language in this group is not picking up on the more academic uses of Spanish.
- Language choice as reported by both parents and by the children shows a consis-

tent shift toward English, with an almost complete shift to English for the MU/C children.

- There is a birth order effect for language choice, second borns using more English than first borns. This effect is statistically reliable, F(1,32)=5.03, p<.05.

Language choice among siblings is correlated with English proficiency, but not
with Spanish proficiency. This suggests that language choice is limited by the
availability of English, and that once available, shift occurs in choice.

Both children and their parents successfully predict the child's proficiency in English, but not their proficiency in Spanish. In addition, the children and parents agree with each other in predicting English, but not in predicting Spanish. The data suggest that members of the community monitor proficiency in English, perhaps using feedback such as school success and degree of usage of English as indicators of proficiency. On the other hand, Spanish proficiency may be defined on a more sociolinguistic basis, with passive participation in the speech community being sufficient in some cases for proficiency in Spanish (see Dorian, 1981).

Reasons for language choice

When we ask children to provide a reason for their language choices with their different interlocutors, they usually tell us that the interlocutor's proficiency or choice of language influenced their language choices. However, some children also refer to ethnicity and culture as factors that influence their language choices (e.g., 'Hablo español con él porque es Mexicano', 'Hablamos ingles porque ella es Americana'), thus giving the impression that languages are to a certain extent delineated by people's cultural affiliations. Sometimes though very rarely, this kind of talk leads to more intriguing discussions about the scope of these cultural affiliations. For example, one child felt that the negative attitudes that some Anglo children have toward Mexicanos would be diminished if Anglo children learned Spanish:

Como dijo la niña, como aquella niña guera, a ella no le importaba los mexicanos, no le importaba ninguno. . . Pero si ella supiera en español y sabía como muchas cosas bonitas que puede aprender uno en el mundo entonces ella no diciera eso de los Mexicanos.

[Like what that girl said, that Anglo girl. She doesn't care about Mexicans. But if she knew Spanish and knew about many nice things that one can learn about the world, then she wouldn't say that about Mexicans.]

Attitudes towards bilingualism and native language maintenance

During our interviews children and parents across immigration groups voiced very positive attitudes toward bilingualism and native language maintenance. As they see it, bilingualism will lead to economic security in this country and in Mexico, the ability to communicate and interact with a wide range of people, and access to knowledge sources both inside and outside of their immediate community. Many parents describe the immediate advantages of having a child who is bilingual as having someone who can help them communicate with monolingual English speakers. Moreover, our interviews reveal that parents are committed to the maintenance of Spanish and advocate its use to varying degrees in their homes. Most are confident that their children will not lose Spanish though they can provide examples of other children who are no longer proficient in Spanish or who no longer want to use Spanish. Interestingly enough, the one parent who feels that her child is losing her ability to speak Spanish also tells about how the school has influenced language choice patterns in her home:

Mi esposo habla inglés con lon niños ahora porque las maestras le han dicho a él que tiene que ayudarlos para que no atrasen en su ciclo escolar. Cuando los niños no entienden bien no pueden aprender. Entonces le decía la maestra que le hablara más a él en inglés y para las tareas.

[My husband speaks English with the children now because the teachers told him that he has to help them so that they don't fall behind in school. When children don't understand well they can't learn. So the teacher told him to speak with him (their son) in English and when helping him with homework.]

When asked to consider how they would feel if they had a child who no longer spoke Spanish, many parents display strong emotional reactions that reveal the depth of their commitment to their Mexican roots and, in some cases, the difficulties that they have had adjusting to life in the US. For example, Mrs. Carroza spoke about how the loss of Spanish on the part of her children or their refusal to use it would eliminate her hope that they return to Mexico or maintain ties with her family.

Pues sería dificil en mi familia si ellos agarran el inglés ajeno y olvidar el español. Será dificil en mi familia . . . Tal vez pasará porque cuando yo les digo . . . cuando ustedes estan grandes yo voy a regresar a mi pais. Luego me dicen, 'Te vas a ir tú mamá porque nosotras no nos vamos.' Es dificil porque ellas se criaron en otro ambiente y no quieren regresar.

[Well it would be difficult in my family if they learn English and forget Spanish. It would be difficult in my family . . . Perhaps it will happen because when I tell them , 'When you are grown I'm going to go back to my country.' They tell me, 'you're going to go (alone) mama because we aren't' going.' It's difficult because they were raised in another environment and don't want to return.

Despite their commitment to Spanish at home, parents do not agree about the role of Spanish in the school. Most are grateful to have their children enroled in bilingual classes where teachers use Spanish when giving directions and explanations. One parent expressed the less common opinion that Latino children should have access to Spanish instruction throughout their elementary school careers to combat the loss of that language. As she reasoned:

El inglés lo van a ir aprendiendo. Me preocupa más el español – que se les olvide. O sea que lo practican bien en escritura, en dictado, y en lectura porque cuando pasan a quinto, sexto grado casi no le van a dejar en español. Entonces yo quiero que adquieran muy buenas bases en español como están haciendo allí (at school).

[Here they'll learn English. I'm more worried about Spanish – that they don't forget it. That is, that they practice writing, dictation and reading because when they go on to fifth, sixth grade there won't be much Spanish (in school). So I want them to acquire a strong foundation in Spanish like they're doing there (at school).]

Some parents worry that the use of Spanish in the classroom will jeopardize their children's acquisition of English. Others worry about the education their children are receiving in the bilingual programs and bilingual schools that they attend. They are concerned that their children are being taught by teachers who are, in most cases, non-native speakers of Spanish and who aren't proficient in that language or, to use their words, speak 'un español mocho'. These parents would rather have their children's Anglo teachers use English and not Spanish, a language that they feel teachers should speak well or not at all. Some parents feel that they, not their children's Anglo teachers, should be responsible for making sure that their children maintain Spanish. For them, schools should be places where teachers use English to instruct students in the various content areas.

Overall, these findings are consistent with the attitudinal data toward language and schooling obtained from Mexican-American (and other ethnic minority) adults in the Detroit area (Lambert & Taylor, 1990), who find strong support for the maintenance of home language and culture, but some hesitation when it comes to the role to be played by the schools.

Conclusions

The model of language shift suggested by the Watsonville and Eastside studies might be forwarded as a set of propositions to be tested against future analyses and new studies:

 The community's loss of individuals with Spanish proficiency is due to the incomplete acquisition of the language or to the acquisition of a contact variety (or some combination of these two), rather than to an individual's loss of proficiency during the course of his/her lifetime.

Proficient Spanish speakers' shift from Spanish to English is principally a
sociolinguistic phenomenon. Having once attained adult-like levels of proficiency
in Spanish, individuals who use mostly or exclusively English in all domains

may not experience subsequent loss of Spanish proficiency.

Incomplete acquisition results from the sociolinguistic rather than the psycholinguistic circumstances of the home. That is to say, even though the parents may be proficient in Spanish, once they acquire proficiency in English and start to use English in the home, the children are unlikely to develop proficiency in Spanish. This model is something like an irreversible seepage model of English proficiency, and predicts that once English proficiency is established, there is a strong tendency to use it, and once this happens, there is minimal learning of Spanish.

Sociolinguistic variation is attributable to social psychological (language attitude, ethnic identity, etc.) as well as sociological factors (social network, rootedness in the United States, social mobility, etc.). This has both between-group (generation

level) as well as within-group variance components.

 Proficiency in English and Spanish have very different meanings for members of the community. English is defined in psycholinguistic terms, while Spanish is defined in sociolinguistic terms.

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