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L1 attrition: A case of a Mexican immigrant in the US

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Abstract

Although language attrition or language loss has been an object of study for many linguists over the past years, the study of it became a subfield of linguistics just a few decades ago. Thus, there are still many areas of this subfield that need further investigation, such as the many factors that may affect the process of L1 attrition. The aim of this paper is to inform about language attrition by providing information about how language loss occur and about most important factors that have an impact on language loss. It was hypothesized that the participant chosen for this paper may suffer some kind of language attrition due to the emerging in a L2 environment, but also that a frequent L1 use, a strong identification with the L1 and its culture or a high motivation to maintain the L1 could make the subject less vulnerable towards language loss. More specifically, we consider whether the participant is truly suffering some kind of attrition or whether the frequent L1 prevents the participant from suffering language loss. Data collected through sociolinguistic and motivational questionnaires revealed that the impact of this variables were high, additionally, data were collected by means of three interviews which were recorded by the participant: the first involved a conversation between the participant and a Spanish native speaker, the second one between the participant an English native speaker and the third one between the participant and a Spanish/English bilingual speaker. Each conversation was analysed and coded for code-switching and grammar errors, both of which have been reported to be signs of language loss. . Also, the conversations revealed how skilled or fluent the participant was in both L1 and L2 languages. The results seem to match the theories provided by other authors explaining that socio-cultural and background factors could have an impact on language loss. In other words, sociolinguistic and background variables yielded interesting results which are implied in L1 attrition research and maintenance.

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Index

1. Introduction

<i>1.1 What is language attrition?</i>	4-5
<i>1.2 Bilingualism, code-switching and borrowing: defining concepts</i>	5-6
<i>1.3 Language attrition types</i>	6-7

2. Main factors in L1 attrition

<i>2.1 Background</i>	7
2.1.1 Age.....	7
2.1.2 Education.....	8
2.1.3 Length of attrition onset.....	8-9
<i>2.2 Sociolinguistic factors</i>	9
2.2.1 Language contact and choice.....	9
2.2.2 Language attitude.....	10
2.2.3 Language aptitude.....	10-11
<i>2.3 Historical context</i>	
2.3.1 Mexican migration to the US and consequences and its impact on language attrition.....	11-12

3. Data collection

<i>3.1 Method</i>	11
3.1.1 The participant.....	12
3.1.2 The interviews.....	12-13
3.1.3 Questionnaires.....	13
3.1.3.1 Sociolinguistic questionnaire.....	13
3.1.3.2 Motivational questionnaire.....	14

4. Results

<i>4.1 The participant</i>	14-15
<i>4.2 Interview results</i>	15-16
<i>4.3 Questionnaire results</i>	17
4.3.1 Impact of the predictable variables in the L1.....	17-18

5. General conclusions.....18

6. References and appendices.....19-33

1. INTRODUCTION

The present article is focused on first language attrition (L1) and second language (L2) acquisition. I seek to review the different aspects that have an impact on language attrition and then to explore how the factors which have been discussed in the literature are able to account for the language attrition process of a particular speaker taking into account the data I have collected. Methodologically, this paper draws on data from a thirty-five year old L1 Spanish Mexican, living in United States since the age of twenty and therefore having lived in the L2 country for 15 years. I will analyze and discuss the different issues regarding L1 attrition process: (i) The influence of background related factors in L1 attrition (age, education, length of time since the onset attrition), (ii) The sociolinguistic factors as causes of the L1 attrition process (language choice and use and attitude towards the two languages) and (iii) The language attrition evidence from a Spanish- English bilingual subject focusing on grammar mistakes and code-switching.

1.1. WHAT IS LANGUAGE ATTRITION?

There are several definitions of attrition that have been discussed in the last decades. Some of them provide an accurate definition, some others define language loss more generally, but most researchers agree that it is quite difficult to get an exact definition of this term.

Language attrition refers to the ‘structural and functional reduction in ability to use the L1’. (Cherciov, 2004, p.5). The speaker emerges in an L2 environment where the use of their L1 is probably reduced or even non-existent. Therefore, the subject finds it more difficult to perform the language in its different areas (writing, speaking, comprehension...). Other authors define attrition as ‘both the modification and the restructuring of the L1 according to L2 patterns under the psycholinguistic pressures of bilingualism (Gross, 2004 a,b cited in Cherciov, 2004) to the point where communication in the L1 is impaired. From the concept of attrition it is assumed that language disintegration is given in cases of bilingual subjects due to the fact that there is an L2 that replaces the linguistic needs of the speaker’s L1.

According to Schmid (2013), first language attrition research was first conducted 30 years ago, and one of the reasons for such an investigation was the fact that even though so much effort was put on the foreign language teaching in the US high-schools, the knowledge of the L2 would rapidly deteriorate over time. Consequently, language attrition became a subject of interest amongst researchers, also wondering if there was a possibility of preventing that language loss somehow. One of the first investigations was Bahrck's (1984) seminal paper involving L2 attrition and the retention of teaching outcomes.

Other theories say that language attrition became a subfield of linguistic in a conference that took place in the University of Pennsylvania in 1980. In that conference, many areas of L2 and language attrition were discussed, with the aim of working on a possible future research.

More conferences were held some decades later as the International Symposium on Bilingualism or the annual European Second Language Association, giving the topic of language attrition an increasing attention.

Different areas of linguistics such as language contact, creolization or aphasia were the first subject of research in order to study the process of language attrition, and more concretely, which areas are the ones suffering attrition first.

1.2 BILINGUALISM, CODE-SWITCHING AND BORROWING: DEFINING CONCEPTS

In this section, a definition of each term will be provided due to the fact that these terms are usually misunderstood due to their close relationship in the field of language acquisition.

Regarding bilingualism, Bloomfield (1933) defines the bilingual subject as a speaker who is capable of using two languages with equal or almost equal fluency. (Cherciov, 2010). According to Bloomfield, bilingualism is restricted to 'native like control of the two languages', however, this definition has proven to be too imprecise and 'does not encompass the behavior and proficiency of the majority of bilingual speakers (Grosjean, 1989; 1994 cited in Cherciov, 2010, p.8). In contrast to this idea, Bhatia & Ritchie (2004) claim that everyone is bilingual. According to these authors,

every person that is able to speak or even understand at least a few words in more than one language is considered to be bilingual.

In the previous section, it was mentioned that language attrition would result, in a way, in a replacement of the L1 caused by the L2, leading the speakers to use different resources in order to communicate in an effective way in their L1. Data from a study conducted by Cherciov (2010) and partly based on the taxonomy provided by Hutz (2004) and Pavlenko (2004), reveals that borrowing and code-switching are two of the most relevant types of cross linguistic influence identified when it comes to attrition. Thus, it is important to make a clear distinction between the two phenomena as they can be easily mixed-up. According to Rafael (2004:169 cited in Cherciov, 2004), while code-switches reflect some kind of L1 deterioration in certain cases, deliberate borrowings aim to fix an existing deficiency in the L1 and arrange lexical and semantic embellishment. The author also explains that borrowings normally accomplish pragmatic roles, including nouns linked to the public sphere, for instance immigration, education or work.

1.3 LANGUAGE ATTRITION TYPES

Regarding a specific terminological and taxonomic framework for language attrition research, many attempts to find such groundwork were made in the first decade of language attrition study. ‘The best-known (and most extensively quoted) of these is the division of the types of language attrition according to what language is lost (L1 or L2), and in what environment (L1 or L2) this loss takes place’ (Köpke & Schmid, 2004, p.8). This split would derive in four different types of language attrition: reversion, dialect loss, L1 attrition in L2 environment and L2 attrition in L1 environment.

Although this four-way taxonomy is still in use for most of language attrition studies, the first two areas would be no longer helpful due to their difficulties regarding methodology, terminology and data analysis.

For instance, complications to differentiate between language reversion (reverting to a previously acquired language, typically the L1) and linguistic problems found in the monolingual elderly population have been encountered, as well as problems such as dialect loss being more similar to language shift than to language attrition. In contrast to this, there are some other methodological distinctions which are vital in language attrition although they have not been completely settled: language

attrition in children and language attrition in adult speakers. (Köpke & Schmid, 2004). Consequently, L1 attrition in the L2 environment and L2 attrition in L1 the environment turn out to be the most relevant divisions regarding language attrition, although there are some other methodological distinctions that should be taken into consideration, as the ones that will be discussed forthwith.

2.1 BACKGROUND

Although language attrition seems to be a universally self-perceived phenomena, it has not been a subject of linguistic investigation until recently. Most people undergoing language attrition tend to forget their first language or at least they are less skilled at a language they were once fluent at, whether the forgotten language had been acquired at school, from a parent or even abroad. (Schmid, 2013).

2.1.1 AGE

Age is considered to be an important factor in language attrition. ‘There is converging evidence suggesting that an L1 system can indeed be eroded to a quite dramatic degree if the attrition process sets in well before puberty’ (Köpke & Schmid, 2004, p.9). In other words, the sooner language loss starts, the higher the probability of experiencing an accelerated attrition process is. In addition, a study conducted by Ventureyra, & Pallier (2004) cited in Köpke & Schmid (2004), also found out that there are cases where the L1 is so attrited that different methods such as neuro linguistic or psycho ones cannot detect any evidence of it anymore, while older attriters have not completely forgotten their L1 due to the fact that their L1 had been completely established before the attrition onset started.

According to this evidence, the subjects experiencing an attrition process after their L1 had been totally established usually experience a more decelerated language attrition. It seems that the data from L1 adult attriters presents a quite low language loss level, no matter whether the subject has been in the L2 environment for a long period of time or not. Although it seems to be that the younger the child is when the language of her environment changes, the faster and deeper she will attrite, neither of these studies

allows one to specify a precise age limit up to which attrition is more likely to occur' (Köpke & Schmid, 2004, p.10).

2.1.2 EDUCATION

Secondly, education is thought to be another fundamental factor in the language loss process. However, it seems that the education factor has a direct influence on L1 attrition in children, rather than an indirect one (Cherciov, 2010). Herdina & Jessner (2002) state that the language competence is more likely to affect less well educated subjects, in other words, justification for higher level of education benefits is that it decelerates or avoids L1 attrition. In addition, higher education is related to a richer vocabulary and more varied structures, more receptivity in L1 reading, and even numerous possibilities for contacting and visiting family in the L1 country, consequently increasing L1 input.

However, empirical studies have not reached any clear conclusion regarding education being a factor that has an impact on L1 language disintegration (Cherciov, 2010). For instance, Yağmur (1997) conducted a research of Turkish attrition in bilinguals living in Germany, being one of the few researchers using education as a control variable in order to measure the different aspects regarding attrition. The participants were separated in two groups depending on their education level. The results showed that the mean score of the most educated reference group was considerably lower than the less educated bilingual group, also evidencing that received L1 education seems to be unable to account for the inter-group studies (Cherciov, 2010).

2.1.3 LENGTH OF ATTRITION ONSET

Thirdly, and according to Köpke & Schmid, length of time since the onset of attrition is another relevant factor when talking about language attrition. Some studies in migration contexts have revealed that the length of time since emigration can have a relevant influence regarding language competence (Mathias, 2004). In a study conducted by Soesman (1997 cited in Mathias (2004), adult Dutch immigrants in Israel presented evidence of an increased loss after the first 5-13 years of emigration. This

study also showed that those subjects that had emigrated a long time ago had longer response to language attrition than those who emigrated a short time ago, that is, less than 5 years ago.

In a second study on Dutch migrants in Australia, de Bot and Clyne cited in Mathias, (2004) some informants that had lived in Australia for a longer period of time than the participants from the previous study were tested in two occasions, first in 1979 and then later in 1987. They did not detect any trace of supplementary attrition over a 17-year period in the L2 country. On top of that, the emigrants were considered to be quite skilled in their Dutch performance, even after living for almost 20 years in an L2 country. These two studies show evidence of the fact that the highest level of language deterioration would occur in the first decade of the attrition onset, that is, the very first moment when the speaker emerges in the L2 environment, remaining significantly stable after that period.

2.2 SOCIOLINGUISTIC FACTORS

2.2.1 LANGUAGE CONTACT AND CHOICE

When inspecting the relationship between L1 use and L1 attrition, language contact and choice seems to be two crucial factors due to two main reasons: type of L1 use, that is, the contexts in which the L1 is used: (family, work...) and L1 amount, the frequency in which the language is used. (Cherciov, 2010). In the case of L1 use, different studies have recently reported varied results. There is a widespread assumption of the idea that L1 attrition is exclusively connected with the frequency of the L1 use, also believing that not using the language is directly involved with becoming an attriter. (Cherciov, 2010). On the one hand, de Bot, Gommans & Rossing (1999) found out that those speakers who did not use their L1 very frequently experienced more attrition over time, showing evidence of the fact that using the L1 could prevent attrition in some way. On the other hand, a study of German bilinguals living in Canada, Köpke (2001, cited in Cherciov, 2010) proved that an infrequent and poor use of L1 is not in and of itself the only source of language attrition, and conversely that frequent language usage of L1 does not guarantee language preservation' (Cherciov, 2010, p.32). From these two studies, what could be concluded is that L1 use does have a positive impact regarding

language loss although it is not the only language factor on which language attrition relies.

2.2.2 LANGUAGE ATTITUDE

Besides the previously mentioned elements involving background, there are also some other factors that affect language attrition. Amongst sociocultural components, language use and attitude seem to be factors that have to be taken into account when talking about language loss, but also difficult and problematic items to analyze in attrition research (Köpke & Schmid, 2004). ‘Attitudes, motivation and affective factors seem to have a strong impact on language learning and to play a role in multilingual community settings, and therefore influence attrition in some way’ (Köpke & Schmid, 2004, p.12). The Ethnolinguistic Vitality Theory framework, a framework that aims to identify the factors related to the strength of the group’s identity feelings (status, demography..) suggested that language has a strong symbolic value within a group identity, and therefore this ethnolinguistic vitality, the ability of maintaining a group’s existence as a collective entity within a different identity and language (Ehala, 2015) could prevent attrition. Nonetheless, some other studies have shown no relevant evidence of this fact. For instance Yagmur’s (1997, cited in Köpke & Schmid 2004) study on Turkish immigrants in Australia did not show any interaction bounded by Ethnolinguistic Vitality measures and linguistic performance, and neither did Hulsen’s (2000, cited in Köpke & Schmid, 2004) study of Dutch immigrant of New Zealand (Köpke & Schmid, 2004).

2.2.3 LANGUAGE APTITUDE

Language aptitude refers to the ‘innate, relatively fixed, talent to acquire and process language structure’ (Bylund, Abrahamsson & Hyltenstam, 2009, p.447). The relevance of L1 contact for L1 preservation has been underlined in the study of language loss throughout the years, and results from a study conducted by Meara et al. (2003) cited in Bylund, Abrahamsson & Hyltenstam (2009) indeed confirm that in

situations of reduced L1 contact, language aptitude would have a positive effect on L1 proficiency. More concretely, what the study revealed is the following: ‘While a positive result on self-reported daily L1 use was found within the partakers with below-average aptitude, this variable seemed not to be significantly correlated (Bylund, Abrahamsson & Hyltenstam, 2009).

Bylund, Abrahamsson & Hyltenstam (2009) also found out that a speaker with a higher degree of aptitude is less dependent on L1 contact in order to retain/attain native like grammatical intuitions, while a speaker with a lower degree of language aptitude would be more dependent on L1 contact to preserve or acquire a high level of proficiency.

On the whole, several important factors that affect language attrition have been described in the previous pages. Amongst factor involving linguistic background, age, education and length of stay in the L2 country seem to be factors having a considerable impact in language loss while in sociolinguistic factors, language contact and choice, language aptitude and the attitude towards the two languages appear to be the most relevant elements. The goal of this paper is (i) to provide information about language attrition as well as to explain which are the variables that have an impact on language loss (ii) to collect and analyze data from a subject possibly experiencing language attrition (iii) to relate the collected data with the variables explained in the first section of the paper.

2.3 HISTORICAL CONTEXT OF THE PARTICIPANT

2.3.1 CONSEQUENCES AND IMPACT OF MEXICAN MIGRATION IN L1 ATTRITION

Over the past forty years, immigration has had a relevant impact on local communities and cities in the United States (Tran, 2010). In 2008, the foreign-born American resident number was one in eight and, together with their American-born children, they accounted for a quarter of the total U.S. population. (Tran, 2010). Nowadays, the number of Mexican immigrants in the United States still outsizes other immigrant groups. The population of Mexican immigrants in the United States were of 11.4 million, accounting for a total percentage of 30.1 of all US immigrants and 10 percent of all Mexicans (Terrazas, 2010).

The most frequent destinations where this migration takes place are “traditional” states such as Texas and California. However, the destinations have changed over the last 20 years, Mexicans and other immigrant groups have chosen “non-traditional” states as settlement areas as Ohio, North Carolina or Nebraska.

All these Mexicans, like many other immigrants in different destinations, had to adapt to a new country and of course to a new culture involving a new language (L2), in this case English. As it has been previously stated, after a long stay in a new culture where the subject does not have opportunities to practice the L1, risking a high probability of experiencing L1 attrition (Terrazas, 2010).

3.1 METHOD

3.1.1. THE PARTICIPANT

According to the data collected both in the sociolinguistic and in the motivational questionnaire, the subject is a 39-year old male speaker, originally from Mexico. The level of education he has received so far is a university degree, and apart from living in Mexico he has lived in Europe for 4 years, in Poland and in England, specifically. As he has lived in England, the subject has taken English classes for 2 years before moving to the U.S. He has learnt English in and out school, and in his opinion he has become more academic with English at university. Regarding Spanish, it is his native language. He was educated in Spanish in Mexico. He does not speak any other language.

3.1.2 THE INTERVIEWS

The interviews consisted of 3 different conversations based on daily topics, that is, normal conversations that could take place in a daily task. One conversation was recorded by the subject with another Spanish monolingual person, the second one with an English monolingual person and the third one with a Spanish/English bilingual speaker. It was specifically asked to the participant to deliver a natural and spontaneous speech, not taking into consideration spontaneous mistakes. Each session lasted around 5 minutes and the conversations were transcribed conforming to CHAT conventions (see <http://childes.psy.cmu.edu>). SMO stands for the Spanish monolingual subject

talking with the participant, EMO for the English monolingual speaker, and ESM for the English/Spanish bilingual subject other than the participant. In order to protect the participant's privacy, the nickname Jor was used to refer to him.

The elements analyzed in this interview are code switching and grammar errors. The reason for the code switching analysis is that as it is suggested in Schmitt (2004) code-switching, may be a possible consequence of language attrition. This theory, also supported by Seliger 1989:176, cited in Cherciov 2010, states that a bilingual subject that experiences attrition may lose a sense of what is grammatical for one or both of the languages and not be able to control mixing two languages in the same sentence. Gender errors in the Spanish speech were also taken as a sign of language loss because Martínez-Gibson (2010), in his study of gender agreement errors in the spoken Spanish of heritage speakers and second language learners states that a speaker that has been exposed to the L2 environment for a long time may experience attrition regarding to gender in the L1 if there is no gender difference in the L2, as in this case. (See appendices A, B, C).

In order to acquire some knowledge about the participant's linguistic and motivational background, he was asked to fill out two different questionnaires. The two questionnaires were based on two questionnaires from Keijzer (2007) found in the language attrition official web page and which were modified according to the information needed for this research and in order to avoid irrelevant or inadequate questions. The selection of questions for the participant was also done on the basis of the aspects that have been considered to be important in the language attrition literature.

3.1.3.1 SOCIOLINGUISTIC QUESTIONNAIRE

The first questionnaire consisted on a personal background set of questions regarding the speaker's L1 and L2 use patterns and cultural and linguistic preferences. Specifically, the participant was asked to indicate which language he uses more often with people he communicates with (partner, flatmates, colleagues), in what environment one or the other is more used (at shops, at church, at clubs) and how often he uses each language. Besides this, the participant was also asked about attitudes towards his country origin and about his cultural orientation. For example, questions like *what is the culture/language they felt most comfortable with* were provided, also asking the

participant to indicate a value of the questions in a 1-5 Likert scale: 1- very rarely and 5-all the time (See appendix D).

Since it was considered that the participant's opinion or feelings about his own language skills were important, he was also provided with some questions in order to know his impression about his own language proficiency both in English and in Spanish. For instance, he was asked if he felt that his Spanish proficiency was lower since he moved to the U.S. or if he considered himself bilingual, that is, if he considered that his proficiency level in Spanish was as good as the one in English. (See appendix D).

3.1.3.2 MOTIVATIONAL QUESTIONNAIRE

The speaker's habits regarding the two selected languages were also reflected in the motivational questionnaire. This questionnaire consisted of a table asking how often he used language in daily activities such as thinking, counting, making jokes or even dreaming. The table also included his familiarity with slang in both languages, as well as the language in which he has an intuitive feeling what is "correct" and "incorrect". Apart from his own point of view, he was also asked about the opinion of people surrounding him regarding language, that is, whether other people consider him a Spanish, English or bilingual speaker. All these tasks were divided in 5 different levels of use : only English, mostly English, both, mostly Spanish and only Spanish (See appendix E).

4. RESULTS

4.1 THE PARTICIPANT

The answers provided in the language background questionnaire reveal that the participant rates his English language proficiency as 'very good' at present, while he rates his Spanish proficiency as 'sufficient', and he feels that he is more proficient in English. The main reason, he states, is that since he moved from Mexico to Idaho, he feels that Spanish is not that strong anymore. He does not use it as much because Idaho is a state predominated by English, and therefore, he speaks English daily. However, he

considers maintaining his L1 ‘important’ so he speaks both Spanish and English (but mostly English) at home with his partner/housemates.

The subject also stated that although he has more English speaker friends and he feels more comfortable in English because it is the hegemonic language in the U.S. and it is used in social spaces like government or agencies, he feels more attached or more at home with Mexican culture because it is his L1 culture environment.

Moreover, Spanish plays a direct role between the subject’s family members due to the fact that they are Spanish monolingual speakers. Although the participant uses English ‘all the time’ for his daily activities as he is emerged in an L2 environment, he tries to stay in touch with his L1, for instance, by listening to the radio in Spanish.

As for the motivational questionnaire data, following the data codification procedure reported in Cherciov (2010), I have classified the responses in the following way. When the subject chose the option only in Spanish or only in English, 2 points were awarded. Answers where the participant chose mostly Spanish and mostly English were awarded 1 point and ‘both’ answers were also awarded 1 point. The scores obtained are presented in Table 1:

Spanish	English	both
5	20	5

Table 1: results from the motivation questionnaire.

The speaker considered that English is the language he uses the most for daily tasks and also the language in which he is more able to perceive whether a sentence is correct/incorrect. However, the speaker assures that he has equal knowledge about slang and making jokes in both languages and he is able to translate equally good from English to Spanish and vice versa. The language with more emotional ties seems to be his native language: Spanish.

4.2 INTERVIEW RESULTS

Following the model from Cherciov (2010), the subject’s expectations about the L1 language skills were compared to the results obtained in the interviews. The results point out that although the subject seems not to feel completely confident about his L1

level as mentioned in the questionnaire, the results show just a little evidence of language attrition. The number of grammar mistakes made either in the Spanish conversation and in the bilingual one is 0, showing that the L1 of the speaker has suffered no attrition in terms of grammar. In case of gender errors, the speaker seems to have more difficulties due to the fact that the total of errors in this area is 2 and considering that there are short interviews and the speaker could make more mistakes in a longer conversation.

In the case of code-switching, there is a high number of times where the subject switches into English (8) while there is no evidence of any code-switching from English into Spanish, matching with the results of the questionnaire and showing that his competence in English is better and that the subject feels more comfortable speaking English rather than Spanish. (See Table 2).

In the Spanish monolingual conversation, the total number of English words used was 23/326, that is, a 0,070%. In the bilingual conversation, it can be seen that the number of sentences in English (28/37=0.75%) was higher than the number of sentences in Spanish. (9/37= 0.24 %). In addition, in the monolingual English conversation, the participant did not use any Spanish words, also supporting the fact that he does not feel the need to use them because he feels totally comfortable speaking in English.

	Spanish	English
Grammar mistakes	2	0
Code-switching	15	0

Table 2: Results from the interviews.

In this section, the results from the data collected from the subject will be reported. As it was explained before, the data collection was divided in two main sections. First, data about the predictor variables discussed in the first section was collected in the sociolinguistic and personal background questionnaire due to their importance on the impact on language attrition. Secondly, the participant's errors and code-switching evidence will be compared with the speaker's expectations about his L1 skills.

4.3 QUESTIONNAIRE RESULTS

4.3.1 IMPACT OF THE PREDICTOR VARIABLES IN THE L1

The variables that affect language attrition discussed earlier such as personal background (age, length of emigration period, education) and sociolinguistic factors (language contact and choice, language aptitude and attitudes towards the two languages) were compared with the data obtained from the subject in the Motivational and Sociolinguistic Questionnaires.

No statistical analyses have been made so the results are tentative and need to be taken as such.

Regarding age, it was explained how the age of the attrition onset is crucial in order to know to how high the attrition level will be. The sooner language attrition takes place, the higher the attrition level will be. The results from the questionnaire report that the subject under investigation had passed puberty when he first moved to the U.S, so language loss started to take place relatively late after puberty. In this case, we expect language attrition in Spanish to be insignificant, matching the results from Köpke & Schmid, (2004) and Ventureyra, & Pallier (2004) study's results. In this particular case, we can say that the signs of language attrition (grammar errors and code-switching) are minimal.

Education was another factor that seemed to be important when talking about language attrition: higher level of education in the L1 decelerates or avoids L1 attrition. The subject's educational background shows that the speaker received education in his L1 setting at least until puberty (primary and secondary education) which could be one of the reasons for why L1 attrition of Spanish is not obvious, although the participant has completed a university degree in English. This observation supports results from Cherciov (2010) and Herdina & Jessner (2002).

Regarding language contact and use, Cherciov (2010) suggests that L1 regular exposure results in attrition prevention. In the case reported in this study, the participant reports making an effort to maintain his L1 skills (for instance, listening to the radio), as stated in the motivational questionnaire.

Finally, as for language attitude, it was said that a strong ethnolinguistic vitality could be a factor preventing attrition. The answers provided in the motivational questionnaire related to language attitude show that even though the subject is living in

an L2 environment, he still preserves a strong ethnolinguistic vitality regarding Chicano/Mexican culture, which could be another reason why the L1 of the speaker is almost intact (See appendix D).

Taking into consideration the results of the present study, we can say that even if the participant feels subjectively that he is losing his ability to speak Spanish, the objective examination of his conversations reveal no signs of attrition in Spanish. However, it is true that the participant tends to code-switch more often when he is speaking in Spanish (into English) than vice-versa. It would be interesting to see whether the same participant would code-switch in English (into Spanish) when he is in a Spanish environment, such as in Mexico with his family. It would also be interesting to keep observing whether given enough time in an English speaking country, the participant's rates of mistakes and code-switches increases in which case, the few errors and code-switching examples could indeed prove to indicate the beginning of an attrition process.

5. GENERAL CONCLUSION

In the beginning of this paper, the variable factors which were considered to have a relevant impact on language loss were exposed one by one. What it can be concluded from the answers obtained in both questionnaires and from the results obtained from the interviews regarding different areas of the languages is that the results match with the theories from different authors exposed in the literature review. In fact, the subject's language deterioration seems to be very little, which could be due to his background and socio cultural situation, which is also confirmed by the data collected from the interviews: he was exposed to English later in life (past puberty), he was schooled in his L1 until secondary education, and he keeps in contact with his L1. The grammar errors are almost non-existent in the L1, although code-switching is constantly present in the speeches, especially from the L1 to the L2. However, this code-switching does not necessarily need to be due to language attrition, but more to a habit from a bilingual person that is emerged in both L1 and L2 environments.

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Appendix A- Spanish interview

@Begin

@Participants: INV invitado, JOR participant

@Filename: Spanish conversation

*JOR: Okay@e Ane, aquí es la segunda conversación con mi amigo.

*JOR: Y mi amigo es de México.

*JOR: Y está estudiando aquí conmigo.

*JOR: So@e esta va a ser todo, tu conversación en Español.

*JOR: So@e Emiliano[/] so@e okay@e, so@e como te está gustando ahorita lo de Chicano Studies?

*JOR <What do you?> @e.

*JOR: Qué piensas?

*JOR: Cómo te sientes tú.

*JOR: Como haciendo Mexicano.

*JOR: Y ahora estudiando bueno esta raza que es, en la raza Mexicana de aquí que se está verificando como Chicano?

*SMO: Esa es la razon por la que decidí tomar esas clases. .

*JOR: Oh, okay@e, yeah@e.

*SMO: Es que fué por que tienes que estudiar lo que ya sabes, lo que tú ya entiendes como [/]

*SMO: como un [/] un individuo.

*JOR: Eso es lo que te va a hacer.. pues un estudiante más fuerte.

*SMO: Y ya tengo un año con esta maestra.

*JOR: Te gusta, uh..

*SMO: Sí, sí, no, sí está bien.

*SMO: Los temas y todo están madre.

*SMO: Y entonces este.. es una chulada de clase, Jor.

*JOR: Si? Te sientes.. te da mas orgullo ser Mexicano y ver que la raza aquí, los Chicanos lo que han este [/] lo que han podido hacer o[/].

*JOR: Qué es lo que te gusta?

*SMO: No, no, el orgullo Mexicano es aquí y en donde sea o sea, uh[/].

*SMO: es el hombre y sus circunstancias.

*SMO: De hecho, un filósofo Español fue es el que dijo eso, el hombre y sus circunstancias.

*SMO: Hay circunstancias que te hacen sentir orgulloso, y hay otras en las que [/] a lo mejor agachas la cabeza, no?

*JOR: Si, claro.

*JOR: Y cuáles son cosas, digamos, algo nuevo que has aprendido de los Chicanos que no sabías?

*JOR: De la historia o de la experiencia aquí en los Estados Unidos?

*SMO: El asunto de los Braseros.

*JOR: Oh, yeah@e.

*SMO: Mi abuelito estuvo en ese programa.

*SMO: y pero no contaba mucho acerca de los braseros.

*SMO: Pero después en la clase con los libros cuando estudias con los compas ya mejor.

*SMO: Y también como Estados Unidos pues ha tratado a México.
*JOR: Si, y desde el principio. Los Estados Unidos ha sido [/]
*JOR: una masacre esto.
*JOR: Partes[/] pedacitos de Idaho, de todo lo que es el suroeste no, de ahora.
*JOR: Los Estados unidos, fué un robo, no?
*JOR: Todo todo todo robos.
*JOR: Y no lo quieren reconocer.
*SMO: Es que no les conviene.
*JOR: No, no les conviene.
*JOR: Especialmente en la historia.
*JOR: So@e, para mí [/] a mí me gusta este tema mucho, por eso soy el asistente.
*JOR: Me gustaría ser profesor en esta faceta.
*JOR: Claro yo aquí [/].
*JOR: Me gusta mucho.
*JOR: Y conste que soy Guatemalteco,
*JOR: Claro yo aquí [/].
*JOR: Me identifico mucho con lo Chicano.
*JOR: Ese fué mi barrio cuando era niño, so@e...
*SMO: No, yo con los Mexicanos, eh?
*JOR: Sí lo entiendo pero eres de México.
*JOR: Y tu experiencia es Mexicana, de México [/].
*JOR: Pero uno que no es de aquí esto es tu experiencia [/].
*JOR: Porque estás bajo la geromía de esto [/] del anglosajón, no?
*JOR: La sociedad Gringa [/] so@e...
*SMO: Sí, este..
*JOR Y que [/]cual es [/].
*JOR: Y qué vas a terminar tú [/].
*JOR:Cuál es tu bachillerato para[/]
*JOR: <political science>@e, huh?
*SMO: Sí, ciencias políticas con un énfasis de[/].
*JOR: Perdón, me salió un poco en inglés.
*SMO: Ciencias políticas con un enfoque a relaciones internacionales.
*JOR: Okay@e, okay@e, Ane.
*JOR: Nosotros vamos a seguir platicando pero vamos a dejarte aquí a cinco minutos[/].
*JOR: So@e esta es la grabación número dos.
*JOR: Tu conversación en español.
@End

Appendix B- English interview

@Begin

@Participants: INV invitado, JOR participant

@Filename: English conversation

*JOR: Okay, so this the English recording with my friend Drew, and myself Jor.

*JOR: So, how is it going?

*EMO: It's going well, man.

*EMO: Nothing, I'm just here with my friend George and I just had a blast, I had a pretty good discussion.

*EMO: Everything's good.

*JOR: Yeah. So did you like the Chua?

*JOR: What did you think about the Chua?

*EMO: I think the Chua is definitely great and [/].

*EMO: In neoliberalism and ideology and[/].

*EMO: I just think that[/] that she was a great writer but I think what she is writing now is nonsense [/].

*EMO: But I say that because I agree with the opposite of her argument.

*JOR: Yeah, uh [/].

*JOR: I think she was great because she talked about like [/] .

*JOR: Coca-cola and even like soccer figures, and sports too[/].

*JOR: To reduce the conflict

*JOR: And going back to what I said earlier in class, she represents a really really reduced group because that was her family.

*EMO: I feel like [/] I thought that part in particular was interesting because she talked about connecting [/].

*EMO: Different ideas.

*JOR: I really enjoy literature courses. I didn't[/].

*JOR: didn't like them that much before, but I really liked that this course was precisely based on that.

*JOR: So, how was your weekend?

*EMO: My weekend was busy, man [/].

*EMO: I just kind of [/].

*EMO: Went to help everyone out there [/].

*EMO: My mom needed help at the store and[/].

*EMO: My family going through a complicated situation right now [/].

*JOR: I get it man.

*JOR: So if you wanna know [/].

*JOR: My weekend was boring, uh[/].

*JOR: I didn't do much, just[/]

*JOR: Stayed home, my daughter was sick.

*EMO: I'm sorry to hear that man.

*JOR: So, Ane [/].

*JOR: This is the English [/].

*JOR: Only English conversation.

@End

Appendix C- The Bilingual Interview

@Begin

@Participants: INV invitado, **JOR participant**

@Filename: Bilingual conversation

*** JORES** Okay Ane, aquí estoy con mi amiga Karina, right?

***JORES:** Karina Solís.

***JOREN:** So we're gonna do your bilingual one and [/].

***JOREN:** this is your third and last conversation.

***JOREN:** So[/]

***JOREN:** the bilingual, this is the bilingual one.

***JOR:ES** So dime tu viaje de México.

***ESB:** Uh..

***JOREN:** Did you have fun?

***ESB:** It was a lot of fun.

***ESB:** Pero me sorprendí de tanta gente [/].

***ESB:** Como estaba de pobre esta vez.

***JOREN:** Can it be because you're older?

***ESB:** Eso también but like for example, like there is little places where they have computer labs for people.

***ESB:** Esta vez they were all closed.

***JOREN:** These like.. internet cafés?

***JOREN:** There is a lot.

***JOREN:** When I lived in Europe in Poland, tenían un montón internet cafés.

***ESB:** Y ahora no los tienen, because they can't afford them.

***ESB:** Estábamos hablando con unos business owners, right?

***ESB:** When I would go and buy, so..

***JORES:** Y qué pasó?

***ESB:** Y me decían, oh si, casi dependemos en ese tiempo del año para hacernos el dinero.

***ESB:** Most of it.

***ESB:** In that little week, because there's hundreds of people from the U.S.

***JOREN:** Tourists.

***ESB:** No, es para los de ese pueblo.

***JOREN:** Ah, okay.

***JOREN:** Where did you go in México?

***ESB:** Yucatan.

***JORES:** Aquí en los Estados Unidos le dicen Michigan, but that's not right, it's Yucatán.

***ESB:** That's another one.

***JOREN:** That's the other one, yeah.

***ESB:** Also, I talk to the guy about neoliberalism.

***ESB:** Él le llamó neoliberalismo.

***JOREN:** Yeah.

***ESB:** Me dijo algo, que prefería que Trump deportará a todos los Mexicanos.

***JOREN:** Oh, interesting.

***ESB:** So más bien ellos quisieron eso para alejar a su gente de esta gente.

*JOREN: So he's saying he's okay with what Trump is doing with deporting Mexicans [/.
*JOREN: Is that what he's saying?
*JOREN: That doesn't make any sense.
*ESB: I think he spent way more time than he wanted into it.
*JOREN: Yeah, and I think it's part of the quick fix [/.
*JOREN: In the last class, we talked about it..
*JOREN: The last conversation I heard about race, okay.
*JOREN: It catches important democracy is gonna start working.
*JORES: Primero, hay que considerar todo.
*JORES: La historia es diferente, luego, las tribus que existen ahí, las regiones que son muy diferentes, y las regiones que vienen con diferentes culturas.
*JORES: Y es que México es bien grande, verdad?
*JORES: So.. es cuando nos dicen a todos, todos somos latinos, o todos somos Mexicanos.
*JORES: No es cierto.
*ESB: Otra cosa, no pudieron ver entre ellos mismos el racismo que hay entre ellos.
*JORES: Sí, porque en México todos somos mexicanos, right?
*JOREN: I think that's the mentality.
*JOREN: We're all Mexican.
*JORBIL: Aquí no hay racismo, but there is.
*JOREN: Okay, Ane. I'm gonna stop here.
*JOREN: I've been talking with Karina.

@End

Appendix D- Sociocultural questionnaire

Name: Jor

Date:

What is your date of birth?

Are you:

- male
- female

Where were you born:

Village/Town:

Country:

4) Would you say that you spoke a variety of Spanish while you lived in Mexico or a dialect?

- standard Spanish
- a dialect, namely:

What is the highest level of education you have completed?

- primary school
- secondary school, level:
- higher education, namely:.....
- university, degree:

When did you come to the U.S. (year)?

Apart from the US, have you ever lived in a country other than the Mexico for a longer period of time (that is, more than 6 months)?

- no
- less than 1 year, in: (town)(country)
- 1 year or more, in: (town).....(country).....

What language(s) did you acquire before starting school?

- Spanish
- Spanish & other
- other

Did you attend any English classes before coming to the U.S? (this has to be in an educational environment, like a school or some similar institution):

- no
- yes, less than 1 month

- yes, less than 3 months
- yes, less than 6 months
- yes, less than 1 year
- yes, more than 1 year

What language or languages did you learn professionally or at school?.....

What language or languages did you learn outside of an educational environment (so outside of school or work)?

Have you ever been back to the Mexico since leaving for the U.S?

- never
- seldom
- regularly, 1-2 times a year
- regularly, 3-5 times a year
- regularly, over 5 times a year

In general, how would you rate your English language proficiency before you moved to the U.S?

- none
- very bad
- bad
- sufficient
- good
- very good

In general, how would you rate your English language proficiency at present?

- none
- very bad
- bad
- sufficient
- good
- very good

In general, how would you rate your Spanish language proficiency before you moved to the U.S?

- none
- very bad
- bad
- sufficient
- good very good

In general, how would you rate your Spanish language proficiency at present?

- none
- very bad
- bad sufficient
- good
- very good

How often do you speak English?

- rarely
- few times a year
- monthly
- weekly
- daily

Do you consider it important to maintain your Spanish?

- unimportant
- relatively unimportant
- not very important
- important
- very important

In general, do you have more Spanish- or English-speaking friends in the U.S

- only English-speaking friends
- both, but more English-speaking friends
- as many Spanish- as English-speaking friends
- both, but more Spanish-speaking friends
- only Spanish-speaking friends

Do you feel more at home with Mexican or with North-American culture?

- with North-American culture
- with both, but more with North-American culture
- with both cultures, equally
- with both, but more with Mexican culture
- with Mexican culture

Do you feel more comfortable speaking Spanish or English?

- English
- Spanish

no preference

Could you elaborate on your answer: why do you feel more comfortable speaking either Spanish or English or why don't you have any preference? What language or languages do you mostly use when talking to your partner or housemates?

- only English
- both Spanish and English, but mostly English
- both Spanish and English, without preference
- both Spanish and English, but mostly Spanish
- only Dutch
- other or no answer

What language or languages does your (ex)partner mostly use when talking to you?

- only English
- both Spanish and English, but mostly English
- both Spanish and English, without preference
- both Spanish and English, but mostly Spanish
- only Spanish
- other or no answer

Are you in frequent contact with relatives and friends in Mexico?

- very rarely
- rarely
- sometimes
- frequently
- all the time

How do you keep in touch with those relatives and friends in Mexico?

- telephone
- letters
- e-mail
- another way, namely:

Do you think Spanish plays an important role in the relationship between your direct family members?

- not at all
- not much
- probably
- a bit
- very much
- no answer

	all the time	frequently	sometimes	rarely	very rarely
With relatives					
With friends					
To pets					
At work					
In church					
In shops					
At clubs or organisations					
I speak Spanish					
	all the time	frequently	sometimes	rarely	very rarely
With relatives					
With friends					
To pets					
At work					
In church					
In shops					
At clubs or organisations					

Do you ever listen to Spanish songs or radio programmes, read Spanish newspapers, books or magazines or television programmes? could you indicate why you think that is?45)Do you think your Spanish language proficiency has changed since you moved to the U.S?

- yes, I think it has become worse
- no
- yes, I think it has become better

Do you think you use more or less Spanish since you moved to the U.S?

- yes, I think I use less Spanish
- no, I don't think I use more or less Spanish now
- yes, I think I use more Spanish

Do you ever feel uncomfortable when speaking Spanish with a Spanish speaker who has never spent a considerable amount of time in an English-speaking country?

- yes
- sometimes
- no,
- never

If you ever do feel uncomfortable in such a situation, could you indicate whether this is also the case when you speak English with someone who, like you, has lived in the U.S for a long time?

- yes
- no

Do you see yourself as bilingual? In other words, do you think you are as proficient in Spanish as in English?

no, I'm more proficient in English

yes

no, I'm more proficient in Spanish

I don't know, because:

You have come to the end of this questionnaire. Is there anything you would like to add? This can be anything from language-related comments to remarks about the questionnaire or research itself?

Appendix E-Motivational Questionnaire

	Only English	Mostly English	both	Mostly Spanish	Only Spanish
Language in which you think most often					
Language in which you dream most often					
Language in which you count / do maths					
Language in which you pray					
Dominant language (i.e. language you are "best" at)					
Language in which you have the largest vocabulary					
Language in which you have no pronunciation problems					
Language which you are able to understand / use intuitively					
Language in which you are familiar with various dialects, slang					
Language in which you have an intuitive feeling what is "correct" and "incorrect"					
Language into which you are able to translate					
Language in which you can understand and make jokes					
Language in which you swear most often					
Language to which you have the strongest emotional ties					
Language / country / culture with which you identify most					

Language spoken by / with most friends					
Language used most on a daily basis					
Language which is your native language.					
Language of which other speakers consider you a native speaker.					

