

# Research Issues

## The Use of English Lexicon in Sonoran Border Spanish

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### Abstract

Sociolinguistic work has consistently shown that speakers who are exposed to two languages simultaneously by virtue of their geographic proximity are likely to engage in language mixing, often referred to as "code-switching." However, there has been little research to account for the language mixing observed along the Arizona-Sonoran border. Thus, the present study attempts to address this situation. This study examined the use of English words in the daily Spanish of border and non-border region residents in Sonora, Mexico. A written questionnaire was applied to 287 public high school students from four cities at varying distances from the U.S.-Mexican border. These cities were Agua Prieta, Magdalena, Caborca, and Navajoa. The questionnaire asked participants to select and provide synonyms for 50 Standard Spanish lexical items. It was hypothesized that a high percentage of subjects would select or provide English words as synonyms rather than Standard Spanish synonyms. Moreover, it was hypothesized that a higher proportion of English words would be selected by participants the closer they lived to the border. Results showed that the use of English words in the Spanish of high school students in the border region of Sonora was significantly higher than those in non-border regions. Pedagogical implications and recommendations are also discussed.

### The Use of English Lexicon in Sonoran Border Spanish

Mexican and US bilingual educators who work towards identifying the best conditions that promote full bilingualism and biliteracy among their students usually wonder how to properly respond to the language mixing observed in their students particularly those who live on the US/Mexican border and/or who are simultaneously exposed to two or more languages by virtue of their geographic proximity to speakers of the other language. Additionally, this situation also puzzles those who are monolingual and may find it challenging to understand what causes this to happen. Thus, it is not surprising to find school administrators and teachers in teachers' lounges at schools wondering and debating what pedagogical responses are appropriate. Should they allow their learners to mix languages? Should they themselves engage in any language mixing in front of their students? Does this scenario promote or hinder first and second language acquisition? Are there any ways in which language teachers can strategically use this opportunity for the benefit of promoting full bilingualism among their learners? Are there any ways of preventing this? Should teachers devote their time to preventing it at all?

Throughout the years, attitudes towards language mixing observed among bilingual speakers have been both positive and negative. On the negative end, for some people, this phenomenon has been a cause for concern. According to Baker (2001), they seem to view it as evidence of inadequately developed or underdeveloped linguistic systems on the part of bilingual learners. This is likely to be the result of their conception of the ideal bilingual person: someone who is equal to two monolinguals in one. From this perspective, the bilingual person is someone who has fully developed two linguistic systems for communication. Conversely, a person who is in the process of becoming bilingual and who tends to mix two languages in communication is typically seen as a person who has a linguistic deficit. Those who believe in this second view typically have a more purist and integrative approach to language learning (Baker, 2001), and/or may simply have a more limited understanding of the phenomenon in question. Consequently, they tend to refer derogatively to the language spoken by those who mix two languages as *Spanglish*, *Hinglish*, *Wenglish*, as in the case of the Spanish-English, Hindi-English, and Welsh-English language mixing, respectively (Baker, 2001).

For others (e.g., Escamilla, 2002; Valdés, 1997), the fact that language learners may choose to use two languages simultaneously in communication provides evidence for the linguistic richness in which they find themselves immersed. They tend to believe that this communication trait among speakers also defines them as bilinguals, as they simultaneously interact with two languages for communication purposes. Thus, instances of language mixing are understood as evidence of the linguistic richness a bilingual person possesses and of the complexities involved in natural language acquisition and development in multilingual societies.

In light of these fascinating and controversial issues, the present study attempts to provide a greater understanding of the issues related to language mixing on the part of speakers situated on the Arizona-Sonora border. More specifically, it reports on the use of English vocabulary in the Spanish of middle-class Mexican high school students living in this region, accounting not only for cognitive aspects of language acquisition/learning, but also for social ones. Thus, this study is intended as a resource for bilingual teachers working with English language learners in this location and/or with immigrant populations from this part of Mexico. Indirectly, this study benefits bilingual teachers who are trying to obtain a better understanding of the linguistic resources second language learners use as they acquire and develop both their native language (L1) and their second language (L2), by virtue of being exposed to them simultaneously in varying degrees. Finally, it may also help teachers of Spanish as first language (L1) in Mexico as they try to understand the nature of their students' first language acquisition.

## Background

According to Baker (2001), several terms have been used to account for different kinds of language switches. In the broadest and most generic sense, the term 'codeswitching' has been used to describe any linguistic switch during conversation at any textual level (i.e., word, sentence, paragraph). For more

specific purposes, other terms have been used, such as codemixing (to refer to changes at the word level, as in “Estoy happy”) and language borrowing (to account for the use of foreign loan words, as in “Necesito abrir el garage”). (See also Rico Sulayes, this volume). Regardless of the word used to describe the specific level or type of linguistic switch, one thing is certain: codeswitching is a purposeful linguistic activity, and it does not happen randomly (Baker, 2001). Consequently, it is imperative that bilingual educators and those who work with bilingual learners gain a better understanding of this non-random linguistic phenomenon, in order to identify what works best for our students.

Presently, there are relatively few studies (e.g., Galindo, 1996; Bustamante, 1982) that address the topic of code-switching in border Spanish in Mexico. Nevertheless, border speakers seem to be aware of the differences between the Spanish they speak, characterized by the noticeable use of English terms, and the Spanish spoken in other parts of Mexico and Latin America. Thus, the present study investigates whether or not Mexicans from the border region speak a variety of Spanish that includes a high quantity of English lexical items, as compared to non-border region speakers.

## **Method**

### Participants

A total of 287 Sonoran high school students from public schools, between 16 and 18 years of age, participated in this study. They were all native speakers of Spanish. These students came from four cities selected for this study: Agua Prieta (n= 75), which has 115,345 inhabitants and is located directly on the international border; Magdalena (n=70), which has 51,435 inhabitants and is located 88 kilometers from the international border by highway; Caborca (n=69), which is located 115 kilometers by road from Sonoita, Arizona, and about 155 kilometers from Nogales (via Magdalena); and Navajoa (n=73), which has 136,162 inhabitants, and is located in southern Sonora, about 600 kilometers from the border as measured along the international highway. Subjects from Navajoa were selected to represent non-border region speakers.

### Materials

For data collection, researchers distributed a written questionnaire that assessed the use of English synonyms among Sonora high school students and elicited demographic information from the participants. Instructions, including examples, were provided in Spanish.

The introductory section of the questionnaire gathered the following personal data from the participants: age, sex, native language, place of residence, length of residence, place of birth, and school.

This first section of the questionnaire was followed by a two-part questionnaire that elicited the use of English borrowings (i.e., Part I and Part II).

There were a total of 50 standard lexical items selected for this study. Forty-four items were selected because of their use in previous studies of English borrowings in Spanish (e.g., Lope Blanch, 1970; Lope Blanch, 1971; Lope Blanch, 1991; Alvar & Quillis, 1984; Hidalgo, 1983; & Ziamandanis, 1995). Six of the lexical items used in this study had not been used in any previous study. These items included the following: *nota* (note), *precio* (price), *tienda* (store), *negocio* (business), *tarjeta* (card), and *red* (network).

Part I was a multiple-choice exercise that assessed the participants' use of synonyms. For each item, there were three options. One of the options was a Spanish word; the second one an English word; and finally "none of the above." (The choice of which option was presented in English or Spanish was assigned at random for each item.)

Part II required the participants to provide two synonyms for each of the 25 remaining Spanish lexical items. No specification was given for the language of the item students were to provide.

Finally, eight additional personal questions were presented following Part II. The purpose of these questions was to gather information from the participants regarding TV access and weekly viewing length, as well as access to computers, use of internet, years of English study at school and outside school (i.e., private lessons), visit(s) to Canada and/or the US for study or living abroad purposes and length of stay, and the degree of ease/difficulty of the written questionnaire used in the present study.

### Procedures

The questionnaires were administered over the course of two weeks in four separate sessions with the assistance of six Sonoran undergraduate assistants who were residents of the various communities selected for this study. Each assistant was a native speaker of Spanish. The administration of the questionnaires took approximately 20 minutes. The administration of questionnaires took place during the students' regular class time, as previously arranged with the school principal and classroom teacher.

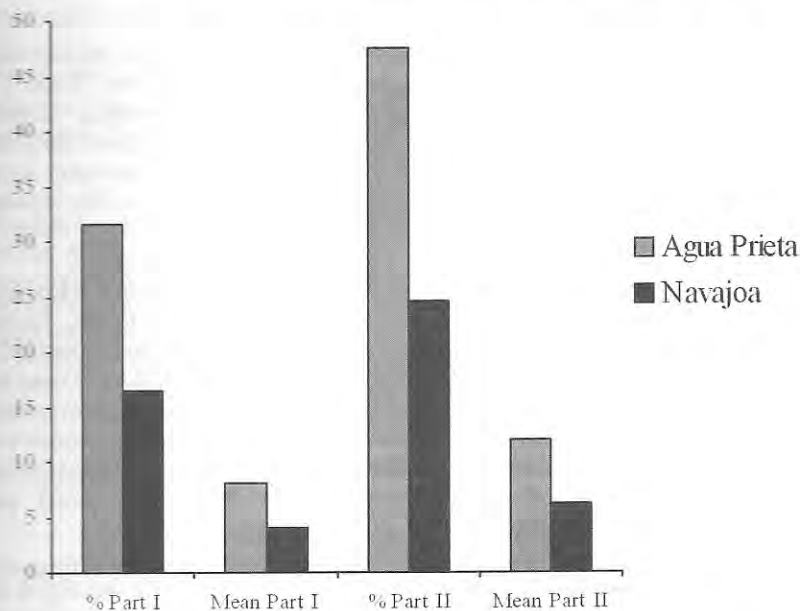
Administration of the questionnaire followed the procedures outlined below:

1. After a brief introduction by the classroom teacher, the research assistant introduced himself/herself, and proceeded to describe in general terms the purpose and procedures of the study in Spanish. No English was used.
2. The assistant asked students who were not natives of the city not to participate in the completion of the questionnaire.
3. The assistant gave students the opportunity to ask questions for clarification.
4. Students answered the questionnaire.
5. After the administration of the questionnaire, all samples were collected, reviewed, counted, and numbered for computational analysis.

### Results

Results according to geographical areas reveal the following. As hypothesized, there was a relationship between the use of English words and the speaker's proximity to the border. The closer to the border the speakers were situated, the higher the frequency of usage was for English words in tasks that called for the use of synonyms. This was the case when comparing responses between the participants from Agua Prieta (border) and Navajoa (non-border). Figure 1 shows this difference:

**Figure 1. A comparison of percentages and means reported by participants in Agua Prieta (border) and Navajoa (non-border) for Part I and Part II.**



Indeed, the results demonstrated a significant difference in the selection of English words as synonyms between participants from the border and those furthest from the border. Appendix 1 presents an item-by-item comparison of the percentage of English synonyms selected for Agua Prieta and Navajoa.

As Appendix 1 indicates, only two lexical items in Part I demonstrated a higher synonym usage by speakers not from the border: *nota* and *puesto*. For Part II, no items demonstrated a higher usage of English words as synonyms by non-border speakers.

In total, participants from the border selected English words as synonyms 31.5% of the time for Part I items, and 47.5% for Part II items. In contrast, participants furthest from the border selected English words 16.5% of the time for Part I items, and 24.6% of the time for items in Part II.

Descriptive statistics for Part I revealed that the means for the number of English synonyms (maximum of 25) selected by each of the participants from the two respective cities were significant: Agua Prieta,  $M(SD)=8.01(4.5)$  vs. Navajoa,  $M(SD)=4.1(3.6)$ ,  $t(146)=5.59$ ,  $p<.05$ . These results indicated that for Part I, speakers from Agua Prieta used the English words significantly more than speakers from Navajoa.

Likewise, for Part II, differences in means for the number of English synonyms (maximum of 25) were also observed for both Agua Prieta,  $M(SD)=11.9(4.1)$ , and Navajoa,  $M(SD)=6.1(4.7)$ ,  $t(146)=7.813$ ,  $p<.05$ . These results indicated that participants voluntarily chose to provide English synonyms for Spanish words.

Regarding the demographic information provided by the participants, there were significant differences between some of the variables. First, TV viewing by participants of both cities, Agua Prieta and Navajoa, showed differences,  $t(146)=3.94$ ,  $p<.05$ . Here, thirty percent more speakers from the border city responded that they watched at least one hour of television daily. However, due to the nature of the item, it is unclear whether any of this viewing takes place in English.

Second, in regards to direct exposure to English (e.g., formal schooling, private tutoring, study abroad, days in the US), the following was found. As one might expect, there was a higher proportion of participants from the border (42%) who had spent more than 14 days during that previous year in the US than the participants from the non-border city (24%). Also, the percentage of border participants who claimed to use some form of private English tutor or lessons was higher than for non-border participants. Both variables, length of visit to the US and private tutoring, were statistically significant,  $t(146)=9.2$ ,  $p<.05$  and  $t(146)=3.6$ ,  $p<.05$ , respectively.

Finally, analysis of participants' self-assessment of the level of ease/difficulty of the questionnaire used in this study indicated that the majority of the participants felt that the questionnaire was easy or very easy to complete (63%). In the case of the participants from both Agua Prieta and Navajoa, predictably, results indicated that more participants along the border (81%) found the questionnaire easy/very easy to complete than non-border participants (52%). Indeed, 42.5% of the participants from the non-border city indicated that the level of difficulty was average. A minimum number of participants in the border (4%) and non-border (5%) cities indicated that the questionnaire was difficult to answer. These results suggest that participants on or near the border have a richer repertoire of linguistic resources than those who are further away from the border regions.

## Discussion

The results showed that Sonoran high school students from the Arizona-Sonora border use English words in higher quantities than those from places further away from the border, specifically the students in Navajoa. This suggests that the

use of the English lexicon has a significant role in the Spanish of Sonoran high school students. Furthermore, the results of this study suggest that these English words are likely to be elements of border Spanish.

The methodology for data collection was perhaps more precise than other methods. Two examples support this point. The first example is a numerical comparison of English words between Part I and Part II. Participants wrote more English words for the 25 items in Part II (2,486) than they selected in multiple-choice options in Part I (1,670). This fact implies that the method used in Part I did not influence the results by virtue of suggestion. That is, presenting English words to students did not serve to impose on, or influence, their choices. Indeed, the traditional method of providing one's own synonyms generated significant numbers of English words.

These results suggest that the notion that the Arizona-Sonora border is a region of contact between English and Spanish emerges as important when considering the implications of the results.

This study shows that Sonoran high school students use a high level of English words in their daily Spanish. The use of English words in Spanish in the border region of Sonora may be something yet to be considered more fully by sociolinguists. This study demonstrated that middle-class high school students in Sonora use more English than those in Navajoa. However, it does not reveal how these students acquired this usage, nor how choice of items changes in time or according to socioeconomic status (SES), age, gender, etc. The results suggest that proximity to the border may provide the necessary acquisition conditions for the community to engage in code-switching.

## Conclusion

In the present study, the speakers' location in the geographic region itself emerged as the single sociolinguistic characteristic to predict the use of high levels of English words on the part of participants on the Arizona-Sonoran border. This phenomenon seems to occur in the border region of Sonora when speakers acquire these terms from the socio-cultural context of the border itself (i.e., through contact with others, experiences, events, traditions, and the daily milieu of life on the border). While speakers may or may not necessarily realize how they became engaged in the use of English words to fulfill communicative needs in Spanish, they are certainly aware that such a choice will not interfere with communication. That is, the underlying expectation of the speakers is that their interlocutor or recipient will understand their choices, even if that choice is not a Spanish word. In this sense, speakers from the Arizona-Sonoran border seem to have a broader sociolinguistic competence than those in non-border areas of the same state (i.e., Sonora). Consequently, teachers must take this information into account in order to effectively meet the needs of their learners.

## Pedagogical Implications and Recommendations

At the beginning of this article, we suggested that language mixing, or code-switching, could be an area of concern for teachers who are promoting full

bilingualism and biliteracy. In this case, these concerns apply to teachers who are promoting the full acquisition and development of both Spanish and English, primarily in their standard varieties. The results from this study show that speakers' proximity to border areas will influence the amount of language mixing in which they are likely to engage. The closer the speakers are, the more language mixing or codeswitching is likely to occur in communication.

These findings indicate that teachers in general in the border regions need not be surprised by the use of English words in Spanish on the part of their students. They also need not be concerned. Language mixing, or code-switching, is a natural occurrence in the daily lives of its speakers, especially in areas where cultures and languages come into contact. What teachers may do, however, is to try to identify ways to help learners understand that this type of communication may not necessarily be widely accepted in non-border areas. Together with the development of linguistic and textual competence on the part of the speakers, teachers should ensure the development of their sociolinguistic competence. In this way, students will be empowered to communicate effectively with those who are not only from their local communities, but from others as well.

Additionally, to promote educational quality, teachers need to make sure that code-switching occurs as a result of a communicative need and purposeful choice on the part of speakers (as in the case of bilinguals), not as a result of the lack of linguistic knowledge (e.g., lexical gap). Language teachers, or other subject area teachers, especially in border areas, may then wish to promote learning situations that will require that speakers demonstrate full bilingual knowledge of the lexicon of the two linguistic systems here discussed. For example, while teachers may allow language mixing for communicative purposes during social situations or educational instances that call for it, they should also encourage students to demonstrate knowledge of the standard equivalent for the L2 word used during an L1 exchange, and vice versa.

Since it is evident that Spanish speakers on the border, or close to the border, have already acquired some English vocabulary by virtue of their socio-contextual conditions, teachers of English as a second or foreign language (ESL/EFL) in particular need to take this profile into account. For instance, in planning and during instruction, teachers may want to assess their students' level or type of already acquired vocabulary and use it to the students' advantage in teaching. The linguistic knowledge students already possess when coming to the ESL/EFL classroom should be taken into account in material selection/development as well as instruction. In this way, teachers may concentrate on promoting learning situations that maximize the knowledge students bring into the learning process instead of re-teaching what students already know, which would be likely to negatively affect the students' motivational level toward classroom instruction. In conclusion, bilingual teachers need not be language policy enforcers. They should not punish or penalize their students for engaging in code-switching. Rather, they ought to continue to do what they have been trained to do: ensure the healthy acquisition and development of both English and Spanish in their classrooms by encouraging learners to demonstrate full bilingual and biliterate proficiency.



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## Appendix 1

Percent of English Synonyms: Agua Prieta v. Navojoa

Section	Part I (%)		Lexical Item	Part II (%)	
	Agua Prieta	Navojoa		Agua Prieta	Navojoa
Alto	53.3	45.2	Adiós	89.3	75.3
Auxilio	25.3	8.2	Almuerzo	33.3	12.3
A veces	12.2	5.5	Apariencia	26.7	9.6
Bebé	74.7	31.5	Calzoncillo	45.3	32.9
Boleto	64	41.1	Camión	49.3	24.7
Cambio	9.3	6.8	Cerveza	21.3	8.2
Coche	16.0	6.8	Consejos	17.3	1.4
Diversión	8.0	4.1	Correo	44.0	26.0
Enojado	6.7	2.7	Dinero	82.7	68.5
Está bien	88.0	60.3	Entrenador	72.0	27.4
Gracias	73.3	41.1	Equipo	25.3	11.0
Hombre	17.3	11.0	Erótico	68.0	37.0
Linda	17.3	0.0	Estilo	14.7	8.2
Muchacha	17.3	12.3	Examen	29.3	8.2
Negocio	37.3	4.1	Feliz	73.3	39.7
Nota	1.3	2.7	Fiesta	86.7	21.9
Papel	26.7	17.8	Gerente	30.7	2.7
Pastel	57.3	28.8	Hola	66.7	23.3
Por Favor	65.3	23.3	Maestro	72.0	43.8
Precio	10.7	2.7	Película	96.0	41.1
Puesto	4.0	12.3	Pez	48.0	42.5
Señor	24.0	12.3	Red	17.3	8.2
Talla	22.7	8.2	Simpático	10.7	5.5
Tienda	8.0	2.7	Tarjeta	14.7	9.6
Vamos	50.7	26.0	Zapatos	54.7	31.5