

What Is Language Fossilization and Why Does It Matter?
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When Selinker coined the term *fossilization* in 1972, he was responding to questions he had begun to ask when he was 8 years old. He wondered why his Yiddish-speaking grandmother, after 50 years of residence in the United States, could not be understood by her grandchildren, who only wanted to speak English (Selinker, 2006, p. 201). Selinker initially estimated that no more than 5% of adult English language learners (ELLs) master a second language with native-like competence continues to drive his research, but experts today now place the estimate of adults who successfully learn a second language at closer to 15% (Selinker, 2006, p. 203). As he points out, one big change in the concept has been the clarification that fossilization is different in different contexts and for different speakers; it is not global (2006, p. 203). In other words, the phrase “a fossilized speaker” is not only disappointing in terms of the vision it projects of a language learner frozen in amber, but it is also simply inaccurate because a speaker who stalls in one particular area of language attainment often continues to progress in other areas that are equally or more complex. Han (2009, p. 148) points to available studies that demonstrate that fossilization is selective, such as the case of a Chinese L1 learner of English as L2 who continued to acquire complex grammatical aspects of English but only partially used the past tense –ed and third-person singular verb suffixes (Lardiere, 2009, p. 50).

Han (2009, p. 138) cites an extensive list of researchers who provide support for the two commonly agreed upon factors for fossilization: L1 interference and the satisfaction of communicative needs. In other words, the parts of a second language that are most likely to provide continuing difficulty for individual ELLs are ones where the patterns of the first

language persist as developmental interlanguage. This “freezing in place” occurs when the first language serves as the platform on which a second language is initially constructed by sequential language learners (Han, 2009, p. 138). Then, when the learner has developed enough fluency in the second language to be understood in spite of frequent errors in grammar and non-native pronunciation, there is little motivation to make the effort to further perfect usage (Han, 2009, p. 138). It has been suggested that for some second language learners, retention of an “accent” is purposeful, not inevitable or accidental. The underlying issue alluded to was termed “ego-permeability” by Guiora (1972) as cited by Schumann (1986, p. 384) in his seminal article on acculturation.

When the acquisition/learning of the second language occurs more for instrumental purposes (getting a job, succeeding in school) than for integrative purposes (desire to identify with another culture or society), preserving one’s mother tongue or accent becomes a way to preserve identity and affiliation with one’s culture of origin. This is an aspect of “ego-permeability” (Guiora as cited in Schumann, 1986, p. 384). During the author’s residence overseas, it was certainly easy to note that most expatriates from the United States who lived in company-owned gated communities and only associated with the local community to employ them as maids or gardeners made no serious effort to perfect their grammar or pronunciation in the local language. Other U.S. citizens abroad with purposes more aligned with learning about the local culture and language tended to be more likely to acquire near-native language skills in the content areas of interest to them, such as academic terminology needed for a particular field of study.

A few years ago, observing errors in undergraduate college writing led the author to collect samples of undergraduate writing to create a corpus use in determining what errors

these students regularly made in formal academic compositions in English. As was true a few years ago and is also true now, the students in most schools and colleges in the United States included English speakers with no knowledge of or negligible, non-fluent knowledge of any other language. Some of the monolingual English speakers attending the North Central Texas area university where the observations took place were accustomed to code-switching from a community language dialect of English into a somewhat more consistent regional standard academic version of English when writing papers for college classes. The community language most of the monolingual English-speaking students used at home and with family members when speaking was typically characterized by some mixture of what some humorists have referred to as the West Texas cowboy twang and the East Texas beauty queen drawl (Hudson, 2003).

Because the courses from which writing samples were collected primarily served bilingual and ESL educators, the classes enroll a somewhat higher than average number of students who are bilingual or multilingual. Some of these students are of Mexican or Mexican-American heritage (or other Latin American origins) but are not fluent in Spanish, having become essentially monolingual due to schooling in all-English or English-immersion settings where use of their first language was strongly discouraged and denigrated. Another significant number of students are bilinguals whose language skills are sufficiently balanced that they feel confident they can become bilingual teachers. However, as is typically the case with bilingual individuals, each feels more confident, fluent, or competent in one language or the other according to the topic under discussion (Baker, 2011, p. 10). A smaller proportion of the students are international or immigrant students or second-generation immigrants who are at least bilingual and often trilingual or multi-

lingual, depending on the national origin of their families.

After informally collecting a corpus of student writing in English, rather than categorizing the errors by grammatical issue, as many researchers do, a set of explanatory descriptors was posited, which might serve to characterize the cause or context of particular types of errors. This analysis, while more in the nature of an informal collection of case studies, still provided a basis for discussing whether the posited descriptors could be useful for instructional planning (Deyoe-Chiullán, 2008).

Subsequently, the author was given the opportunity to teach a group of bilingual teacher aides a sequence of bilingual teacher preparation courses, extending over two semesters and a summer session. These students were seeking college degrees in order to become certified as bilingual teachers and were in a special program that facilitated development over time of a strong sense of a supportive learning community. Most of these teacher aides were heavily English dominant due (at least in part) to experiences they had growing up in schools where Spanish usage was either prohibited and punished or decidedly frowned upon. In response to their needs to become fluent in academic Spanish as a medium of instruction, they were required to write primarily in Spanish and were provided appropriate non-punitive corrective feedback. This permitted informal collection of a quantity of their writing in Spanish. The types of errors in their writing were then compared and contrasted in terms of descriptive characterizations similar to those previously used for writing in English by other undergraduate teacher education students. (Deyoe-Chiullán, 2009).

In reviewing both of these informal studies, two interesting observations were made. One observation is that both monolingual and bilingual speakers and writers commit errors

that appear to be developmental in nature. That is to say, the errors are characteristic of younger learners of the language. Such errors may sometimes be ascribed to “carelessness,” and may be viewed as features of performance that do not accurately reflect the speaker or writer’s underlying language competence. However, they occur frequently and rarely disappear with correction. In short, they are relatively stable and observable in the usage of more than one individual of similar background. Thus, one finding is how similar the types of errors are, even the specific errors, among monolingual and bilingual writers. These errors include

Lack of –ed past/preterite: She listen to the teacher yesterday.

Lack of –s verb ending: He speak English most of the time.

Lack of –’s/s’ possessive: The student answers were correct.

Lack of –s plural: The student are here.

A second interesting observation is how much more detail is needed to adequately describe the probable causes or sources of different language “products” of bilingual speakers and writers when addressing developmental or interlanguage usages. *Interlanguage* is a preferred term for language usage of a bilingual person whose language performance exhibits forms that are considered developmental or “immature” for the speaker’s age among monolingual speakers of that language. In essence, it is a term that avoids the pejorative characterization as an “error” of what is probably a developmental version of usage that will be corrected naturally with additional experience using the language. Han (2009, p. 137) cites Selinker regarding the development of the term *interlanguage*. The concept of *interlanguage* is described as a “metaphorical halfway house” between the native language and the language being learned, where the first language provides building blocks

with additions from the second language, producing forms that are neither fully L1 nor fully L2 (Han, 2009, p. 137).

When viewed in the context of the continuing growth of English as a world language, the areas where developmental and interlanguage usage differences appear to be identical among monolingual and bilingual speakers and writers may suggest future linguistic shifts. They may forecast ways in which, over time, simplified structures and varied usage patterns will come to be seen as standard, or as stylistic variants. For example, frequent omission of the –ed suffix on simple past tense verbs with regular conjugations, particularly when an adverb of time makes clear that an event occurred previously, may soon be seen as a stylistic option. Eventually the past tense suffix might disappear in favor of using context to indicate the time frame involved, as some other languages do.

Considering that by 2010, China was poised to become the largest English-speaking nation on earth (Walker, 2009) and that Chinese does not inflect verbs for person or tense, the influence of many speakers and writers of English who find adding the third person singular –s suffix and the –ed past/preterit suffix tedious and unnecessary may heavily influence future changes in English grammar. Adding to this possibility is the fact that AAVE (African American Vernacular English) speakers also typically omit these features, as do speakers of most creole languages (Odlin, 1989, p. 11) and speakers of many languages who learn English as a second language (even those whose first language is heavily inflected for person, tense, number, gender, and so on.).

It may well be that attempting to enforce the use of these particular suffixes, which are so vulnerable to becoming expendable for reasons of dialect, cross-linguistic influence, or interlanguage and developmental difficulty, is already a case of “beating a dead horse.”

Bragg (2004, p. 293) comments that “There are scholars who believe that the future of English will no longer be shaped by its founding family but by L2 speakers—those who vastly outnumber the ‘core’ speakers—for whom English is a second language.”

Indeed, shifts in geopolitics, population, and other arenas have changed viewpoints within the bilingual education context. As García points out (2009, p. 117), “Some schools, in some societies, have started to adapt in order to recognize the multilingualism in their midst. They continue to use bilingualism as a way to more effectively teach a dominant language and to add an additional one, but at times, bilingualism is used to educate profoundly and globally, giving parents, both minority and majority, options that had not been previously available.” She goes on to state that “Besides language shift, language maintenance, and language addition, bilingual education programs have increasingly had as sociolinguistic aims: 1. Bilingual revitalization 2. Bilingual development 3. Linguistic interrelationships”

In a way that is similar to the shifts in the focus of bilingual education that García sees and foresees, the concept of fossilization has undergone changes over the years. From the initial assertion that non-native usage that became a stable part of a learner’s L2 was permanently fixed, the concept has been altered. The newer view includes the recognition that interlanguage contains both accurate and inaccurate usage (Larsen-Freeman, 2006, pp. 190-191) and that the aspects of it that are relatively stable and remain part of a learner’s idiolect are selective and vary by content topic, grammatical issue, and an individual’s personality and experience (Han, 2009, p. 148; Lardiere, 2009, p. 50). Likewise, researchers now tend to focus on finding ways to “enliven” the learner’s capacity for continued development of the L2, regardless of age or experience. Thus it is that one may write of

“rescuing Spanish for heritage users of the language” instead of writing about “fossilized learners” who are frozen by their past limitations. The following strategies listed in previous studies are appropriate ways to bring to life and support the vibrant growth of a learner’s first, second, third, and subsequent languages (Deyoe-Chiullán, 2009):

Basic principles for rescuing a language include

- Gently give knowledge that appears to be needed without editorials about why students should already know better.
- Make it clear that your corrections are a gift of knowledge, not a punishment for taking risks and trying to learn.
- Provide appropriate non-punitive corrections but avoid requiring rewrites or attention to every error corrected.
- Highlight errors students may be able to correct if they read the text or other writing aloud to themselves or to a peer and be prepared to courteously explain your editing.
- Cue homophones by writing enough explanation to make clear the differences between words that are substituted:

English: since/sense, seize/cease, peak/pique/peek, parity/parody.

Spanish: haber/a ver, hacer/a ser, coser/cocer, casar/cazar, and correct missing accents and special symbols until some proficiency has been developed in standard orthography; afterwards, highlighting may be sufficient.

- Provide private written corrections for errors students have probably been making ever since they started speaking and writing in the language. These errors need to be corrected without embarrassing the writers, so that they have an opportunity to see an alternative to what currently comes naturally to them.

- Focus lessons are not likely to be appropriate for developmental errors that are still part of a learner's usual speech, as the possibility of causing a student embarrassment or to feel singled out for correction will almost certainly exist. However, when a high level of mutual support exists within a group, students may elect to discuss some of these types of errors.
- Show students how to express ideas or structures they may never have heard spoken or seen written. Transfer or interference errors provide the best opportunity for targeted teaching of idiomatic usage and language-specific structure. However, mini-lessons should be presented as generic issues experienced by many bilingual users of the language. These are common and persistent errors due to differences between languages, and they should not be identified with a particular speaker's or writer's usage (Deyoe-Chiullán, 2009, pp. 172-180).

Bilingual and ESL teachers serve as the language models for students who have few other experts they can turn to; thus, it is necessary that they possess advanced academic skills in the language(s) of instruction, so that they can confidently deliver instruction at a high level of competence and fluency. This becomes more important as more schools implement dual language programs that require a high level of rigor in both languages. The Center for Applied Linguistics (CAL) now lists 415 dual language schools in the United States (Center for Applied Linguistics, 2012). In response to calls for accountability and rigor in teacher preparation, bilingual teachers now must demonstrate their literacy skills in the second language of instruction, as well as their ability to understand and speak the language (Texas Education Agency, 2009).

Most Spanish/English bilinguals who have grown up totally or primarily in the United

States (the majority of U.S. bilingual teacher candidates) have had little or no opportunity to acquire academic fluency in Spanish (or any other language they speak). If they were served initially in bilingual elementary school classes, every effort was made to place them in all-English classrooms at an early age, before they had fully achieved literacy in their mother tongue. Because Texas law requires and provides funding for all-English classes for most students and because of the pressures exerted by standardized testing, most bilingual teacher candidates in Texas have had limited or no opportunities to become models of literate usage of Spanish (or other languages) but many opportunities to achieve that goal in English.

In fact, those whose facility for English caused them to be assigned few or no classes in their home language are the ones most likely to have succeeded in the school system past middle school when students are more likely to consider dropping out, to have persevered with all-English learning, and to have graduated from college as fluent, literate models of English (Gwynne, Pareja, Ehrlich, & Allensworth, 2012). Unfortunately, most retain, at best, a fragmented knowledge of an informal community variety of Spanish or another language with limited use of literacy for any purpose beyond writing letters to family members in the country of origin of their parents or grandparents.

The technical description of the typical results of the inequitable academic development of a community language in favor of an institutionally required language has sometimes been referred to as *subtractive bilingualism*, which Cummins and others have indicated (Office of Bilingual Bicultural Education, 1986) may lead to lower long-term proficiency in both languages, particularly in the socially stigmatized minority language (even when it is spoken daily by a majority of the community). The failure to capitalize on the critical periods for language development and literacy instruction through the language

that carries the greatest emotional attachments and motivations for the child may lead to delays in acquiring the second or socially prestigious language. This is especially problematic since access to meaningful and age-appropriate content is delayed awaiting achievement of sufficient language development in English to support academic instruction in that language.

When the student's mother tongue is used fully for all purposes, under conditions that provide full respect for it as an academic medium valid for all purposes and contexts, acquiring and learning the second language is able to proceed more efficiently and with much better long-term outcomes in both languages. This is beginning to be achieved in some of the noteworthy dual language programs that have been extended to the full K-12 public school instructional model. The Pharr-San Juan-Alamo school district in South Texas has recently graduated its first class of fully bilingual, bicultural, biliterate youths who are well prepared to seek satisfying bilingual professional roles in areas where their skills are greatly needed (Bergham, 2009).

If all candidates for bilingual teaching were graduates of such programs, there would be less need to "rescue their heritage Spanish," as teachers currently have an obligation to do. When teachers fail to support students as they attempt to revive and revitalize their academic usage of Spanish or another native tongue, they undermine the success of all the school bilingual programs graduates go forth to serve. Teachers who feel confident of their academic skills in English but embarrassed to expose their fossilized or atrophied language skills in their mother tongues do not follow the prescribed instructional guidelines for even transitional bilingual instruction and typically deliver English immersion instruction, regardless of the program title under which they are employed. This renders any research

comparing the outcomes of bilingual teaching versus English immersion invalid and meaningless since only the program titles differ, not what goes on in the classrooms.

During several years, ending in 2007, Southern Methodist University operated a bilingual teacher certification/endorsement program for the benefit of the Dallas Independent School District (DISD), bringing in Puerto Rican teachers to help fill the need for bilingual teachers. The program had the effect of circumventing these issues by providing a group of education professionals who already possessed fully fluent academic Spanish literacy. They have had a notably positive role in supporting higher level academic expectations in bilingual classrooms in the DISD, particularly when they have team-taught with ESL educators whose strengths in preparation for teaching second language learners their own dominant languages provided the balanced needed for successful dual language instruction.

Nevertheless, school districts cannot simply import sufficient numbers of already prepared Spanish-speaking teachers to meet the burgeoning needs of an increasingly bilingual community. Such immigrant teachers help greatly and offer many needed talents but, as immigrants, they too go through a period of social and cultural adjustment and their contributions need to be complemented by bilingual teachers from the local area who have had the necessary academic and linguistic support to develop the same high levels of literacy and content language competence in Spanish. Such homegrown bilingual teachers afford the benefits of direct experiences in the context of the local community, are sensitive to the social and political undercurrents that may tend to undermine the best-planned programs, and provide vibrant successful role models for children who view their own positive futures through their teachers' eyes with the encouragement of their teachers' hard-

won successes.

What is language fossilization and why does it matter? Perhaps rather than using a physical science term such as *fossilization* or a medical term such as *atrophy* to describe areas of usage where a language learner has developed stable ways of communicating that are perceived as “incorrect” or “non-native,” educators should simply recognize that all learners continue to develop throughout their lifetimes in every language they use, for whatever needs or purposes arise. As Larsen-Freeman (2006, p. 195) asserts, perhaps there is no “end-state” of language proficiency to describe since learning never ends and the status of a person’s language knows no “status quo” because communication is a living, breathing phenomenon that shifts and shines in iridescent beauty.

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