

Raising phonological awareness in the EFL class through the analysis of loanword adaptations

Desarrollo de la conciencia fonológica a través del análisis de adaptaciones en clases de ELE

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ABSTRACT

Some phonologists have been interested in the transformations that are applied to words when they are borrowed from a foreign language, and this could be analyzed through the psycholinguistic study of phonological awareness, which is the ability to attend to the phonological structure of language as distinct from its meaning. Learning a foreign language presupposes the need of raising phonological awareness in L2. Therefore, there is a concern about the ways teachers could relate both phenomena, adapted phonetic loanwords into the process of analysis of the phonological issues in the EFL class. The objective of this research is to provide EFL teachers with a theoretical insight about the phonological processes involved in the study of phonetic loanwords that can be used to raise phonological awareness in spite of their adaptations in L1. First, the analysis based on the classification of adapted borrowings is presented to establish the assimilated components that could be applied in the design and implementation of tasks suitable for developing phonological awareness. One of the results achieved during this research is that during speech perception, the process of phonetic decoding nonnative maps are in accordance with the native phonology. Moreover, the perceptual assimilations that result from it are completely automatic and apply beyond the listener's awareness. Other factors can be involved in the perception process, like orthography - expected to be part of the adaptations that are either based on written input or established by speakers who know the loanword spelling in the source language.

Key words: phonological awareness; borrowing adaptations; assimilated loanwords

RESUMEN

Algunos fonetistas se han interesado por las transformaciones que sufren los préstamos lingüísticos, fenómenos que pueden analizarse a través de la conciencia fonológica (CF) - la habilidad de apreciar la estructura fonológica del lenguaje separada de su significado. El aprendizaje de una lengua extranjera conlleva a la necesidad de desarrollar dicha habilidad en la L2. Es por ello que existe la problemática sobre las formas en que se puedan relacionar ambos conceptos: la adaptación de los préstamos dentro del proceso de análisis de la CF en las clases de ELE. El objetivo principal de esta investigación es realizar un análisis teórico sobre la clasificación de los préstamos adaptados para establecer los componentes asimilados que pueden aplicarse en el diseño y la implementación de tareas que desarrollen la CF a pesar de las adaptaciones. Entre los resultados obtenidos en la investigación, se comprobó que durante la percepción del habla, el proceso de mapeo dentro de la decodificación fonética de la L2 existe concordancia con la fonología de la L1. Las asimilaciones perceptuales que se derivan de este proceso son completamente automáticas (su aplicación va más allá de la conciencia del receptor). Existen otros factores que se incluyen en el proceso de percepción, como la ortografía, que puede ser parte de las adaptaciones, ya sea en el registro escrito u oral por aquellos hablantes conocedores de la escritura de los préstamos en su lengua original.

Palabras claves: conciencia fonológica; adaptaciones de los préstamos lingüísticos; préstamos asimilados

INTRODUCTION

Natural languages are living eco-systems. As per Campbell (1998), they are “subject to continuous change due, in part, to the natural phenomena of language contact and *borrowing*.”

Borrowing is a process that involves incorporating features of one language to another, and can be studied from both synchronic and diachronic perspectives. To broaden the concept, Thomason and Kaufman (1988) have defined borrowing as “the incorporation of features into a group’s native language by speakers of that language; the native language is maintained but is changed by the addition of the incorporated features”.

When a word is borrowed into another language, the loanword undergoes certain modifications to fit into the phonological system of the recipient language. These modifications may result in either ‘adaptation’ (where the phonological composition of the loanword is modified) or ‘adoption’ (where loanwords get assimilated into the recipient language while preserving their original form and pronunciation in the donor language).

On the other hand, there is the concept of **phonemic awareness** (also known as *meta-phonological awareness*); it broadly refers to the ability to perceive and manipulate the sound system of a language independent of meaning (Goswami and Bryant, 1990). It includes both basic units of a language such as phonemes and larger units such as rhymes and syllables. Similarly, Cassady, Smith and Taylor (2005) and Snow et al. (1998) define the term as “a speaker’s sensitivity to the phonological system of a language, including sounds, syllable structure, and phonotactics of the language.”

There are different levels of *phonological awareness* within words, including syllables, onsets and sounds. Recognizing this has important implications on supporting student development of *phonological awareness*. Good readers look for familiar “letter patterns” as a strategy when attempting to decode or spell unfamiliar words. In other words, they use familiar sound chunks from known words not just individual sounds. This “chunking” of sounds makes the reading and spelling process much more effective and efficient. These letter patterns are based on familiar syllable or rhyme patterns as well as sound clusters and individual sounds. This ability to look inside words for syllables, rhymes, and individual sounds when reading and spelling is based on the student’s phonological awareness. Students have to be able to segment, blend, and manipulate syllables, onset and rime, and sounds if they are going to be successful in using letter-sound knowledge effectively for reading and writing. The phonological awareness skills of segmenting and blending are most highly correlated with beginning reading acquisition (Snow et al., 1998).

While teaching English as a foreign language (EFL), teachers should pave the way to raise phonological awareness of L2 in the classroom. However, there are certain loanwords that have come from English and have been settled into L1, generally with their adaptations. This presupposes a challenge for the EFL teacher as they are words already familiar to the students but have been assimilated into Spanish – L1 in the current investigation – what can cause confusion or pronunciation mistakes due to language change, when words get borrowed from a source language into a target language, leading to sounds and sound combinations which did not previously exist in the source language. Therefore, the objective of this research is to provide EFL teachers with a theoretical insight about the phonological phenomena involved in the study of phonetic loanwords and relate such occurrences with phonological awareness in spite of their adaptations in L1.

METHODOLOGY

The importance of English as the hegemonic global language along with the prestige attached to it have facilitated the continuous incorporation of English loanwords into Spanish over the last few decades. This has affected every domain of the linguistic system, from more general, everyday language to specialized languages. In fact, the influence of English words in various languages has been widely explored and in this respect, Spanish is no exception.

To have a better understanding of the processes involved in the phonological adaptation of loanwords, a theoretical and qualitative analysis was carried out. It is important to distinguish two types of loanwords. First, *historical* loanwords, i.e. words that have entered the borrowing language and are commonly used by monolingual speakers, have been studied most often. Monolingual speakers who use these loanwords never hear their source forms, and there is thus no reason to postulate an underlying form that differs from the output form in their grammar. In other words, a phonological analysis of the modifications these words have undergone when entering the borrowing language has no direct psychological reality. Rather, it receives a diachronic interpretation, in that it accounts for the adaptations applied by those speakers who have originally introduced the loans. The second type of loanwords are *on-line* adaptations, i.e. foreign words that are borrowed 'here-and-now' (Kenstowicz and Sohn, 2001).

Phonetic borrowings are most characteristic in all languages, being called loanword adaptations and are originally borrowed with their spelling, pronunciation and meaning. However, they generally undergo assimilation, i.e. each sound in the borrowed word is substituted by the corresponding sound of the borrowing language. Moreover, the position of the stress is very often influenced by the phonetic system of the borrowing language.

In the following diagram, there is a representation of the phonological integration of the lexical borrowing from the donor language (DL) to the receiving language (RL), and it goes through 4 stages: perception, production, spread and variation/conventionalization. Loanword adaptations take place during perception –stage 1- and are due to the automatic process of phonetic decoding, which maps nonnative sound patterns onto the phonetically closest native ones. Consequently, production of such words undergo certain phonological phenomena that is explained in the Results and Discussion section of this paper.

In the case of stage 3, more speakers can become familiar with a new foreign word or expression. The community of users of this word can grow to the point where even people who know little or nothing of the source language understand, and even use, the novel word themselves. The new word becomes conventionalized: part of the conventional ways of speaking in the borrowing language. At this point we call it a borrowing or loanword. It should be noted that not all foreign words do become loanwords; if they fall out of use before they become widespread, they do not reach the loanword stage. One important element that should be pointed out about the fourth stage is that **conventionalization** is a gradual process in which a word progressively permeates a larger and larger speech community, becoming part of ever more people's linguistic *repertoire*. As part of its becoming more familiar to more people, a newly borrowed word gradually adopts sound and other characteristics of the borrowing language as speakers who do not know the source language accommodate it to their own linguistic systems. In time, people in the borrowing community do not perceive the word as a loanword at all. Generally, the longer a borrowed word has been in the language, and the more frequently it is used, the more it resembles the native words of the language. Then, phonological awareness comes into view as part of this adaptation process that loanwords have undergone as part of the phonological integration in L2.

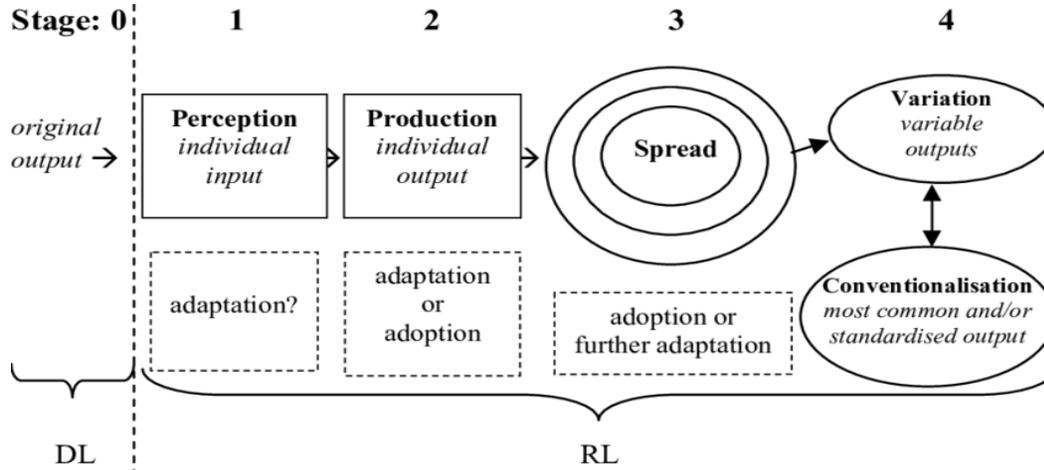


Figure 1 Overview of a the phonological integration in the lexical borrowing

Peperkamp and Dupoux (2003) review psycholinguistic evidence that all aspects of non-native phonological structure, including segmentals, suprasegmentals, and syllable phonotactics, are systematically distorted during speech perception. That is, non-native sound structures are assimilated to ones that are well-formed in the native language, both by monolinguals and by bilinguals.

RESULTS AND DISCUSSION

In the case for loanwords adaptations, there are some phonological phenomena involved that can be perceived in borrowings coming from English to the Spanish language:

According to Hall (2011), the term **vowel epenthesis** can refer to any process in which a vowel is added to an utterance. Beyond this simple description, however, vowel epenthesis processes vary enormously in their characteristics, and many aspects of their typology are still not well understood. In the case of Spanish, words coming from English with a consonant cluster in initial position starting with an –s, tend to be pronounced with / ε / e.g. *sport, smartphone, studio, spa*. This is explained by the fact that there is no word originally in Spanish that begin with an –s, thus the speaker tend to add the vowel sound to fulfill his phonological awareness in L1.

Another phenomenon is **consonant deletion** (or *degermination*). This refers to the deletion of germinate consonants, usually in final position of a word or in consonant clusters within a word. Some examples of this take place in *file, cake, shorts, cold wave, software, shopping, ketchup*.

The process of **consonant substitution** occurs during borrowing and involves substituting consonants in the source language with others in the target language. It is usually attributed to the absence of equivalents in the target language e.g. *show*.

Two specific cases within this process should be mentioned: **velarization** and **aspiration**. Some adapted loanwords have undergone the phenomenon of velarization when a word ends in a nasal sound like /m/ and it becomes a velar nasal, e.g. *zoom*. Other words, like *baseball*, that contain the /s/ sound in mid position, would also substitute it for the fricative sound /h/.

When certain loanwords are borrowed into Spanish, there is a phonological issue known as **vowel substitution**, that is a tendency to change vowel sounds (usually long ones for shorter ones), like it happens to words such as *cocktail, videoclip*.

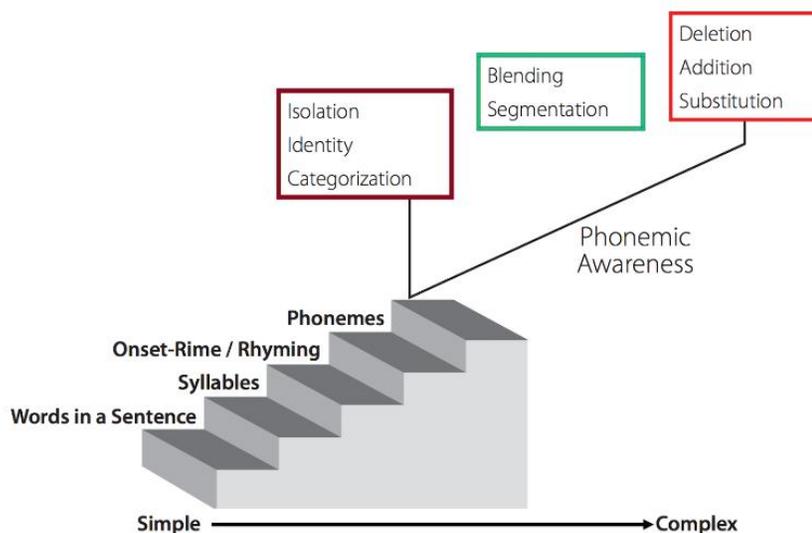
In the case of **consonant cluster accommodation**, the language has become sensitive to consonant clusters due to three reasons, namely: its long association with foreign languages, its susceptibility to borrowing foreign words and its identification with Anglicisms of the borrowed items. One example that represents this case is the word *boxspring* (there is a combination of consonant cluster accommodation and aspiration).

In order to relate the phenomena involved in loanword adaptations and the processes regarding phonological awareness, there are three major concepts that should be stated and explained. First, traditional **phonics** approaches begin with a visual symbol (letter) and impose a speech sound. This abstract process stresses associating letters (visual symbols) with auditory sounds and may be taught to students in various contexts, i.e., in isolation and at the beginning and ending of words. Rhyming and word play activities may be included in language arts activities.

Phonemic awareness training approaches sound-symbol association from the opposite direction: first, students explore speech sounds by hearing, feeling and seeing their characteristics and comparing and contrasting their properties. The auditory element of the speech sound is connected to the more basic oral-motor activity by which the sound is produced. Students then approach letters (symbols) with full knowledge of speech sound characteristics including how they are produced. Students are able to make more concrete connections between the auditory speech sound and the letter name. Activities such as sound deletion, segmentation, manipulation, and synthesis (blending) play a large role in phonemic awareness activities.

Phonemic awareness is the most difficult aspect of *phonological awareness*—a term that encompasses awareness of phonemes and larger units of spoken language—and typically is attained after students develop an awareness of rhyming words, syllables, and onset-rime units (Cossu, Shankweiler, Liberman, Katz, and Tola, 1988; de Manrique and Gramigna, 1984; González and González, 1993). In loanword phonology and contact linguistics, the predominant assumption is that adaptation is the more common outcome of the integration process. This is very probably a correct observation, although differences between different contexts of borrowing should still be taken into account before making sweeping claims.

In the figure that follows, there is a diagram in which the process of phonological awareness is depicted by the steps to achieve when learning a foreign language. From the last step, three major stages are derived: 1) isolation, identity and categorization; 2) blending and segmentation; 3) deletion, addition and substitution, being the latter stage explained in the previous paragraphs of the Results and Discussion section of this paper.



Adapted from 95 percent group

Figure 2 Steps to achieve phonological awareness in L2

Even when borrowers have the necessary competence to accurately produce a specific word in the donor language, which is often their L2, they are sometimes known to alter its pronunciation (i.e. adapt it) when they produce the same word as a loanword in their L1, the recipient language (Friesner, 2009). Therefore, several authors have argued that taking sociolinguistic factors into consideration is necessary in loanword phonology.

Another type of example for the adoption-boosting effect of higher intensity of contact is the phenomenon of renorming in the pronunciation (and sometimes also in the orthography) of established loanwords. In renorming, the old form of the loanword stemming from its initial period of borrowing with low intensity of contact is revised to become closer or identical to its donor-language form in a later period where the intensity of contact is higher.

Phonological awareness is generally measured by how well learners can focus on the structure of the L1 and L2 system (Venkatagiri and Levis, 2007); however, there are some specific tasks which introduce this construct better. The first task which is still used was the phoneme deletion developed by Bruce (1964). In this task, the learner is provided with a word (e.g., sofa) and is supposed to cross out a particular sound mentally (e.g./a/) and say what is left, (sof). Other tasks measuring phonemic awareness are phoneme blending (e.g., what is a /s/ /o/ /f/ /a/?), phoneme counting (e.g., tap out each sound in sofa) and phoneme reversal (e.g., say the sounds of sofa backward). Awareness at larger units encompasses syllable segmentation (e.g. say each syllable of the word family) and rhyme judgment (e.g., does film rhyme with realm?). If referring to loanwords, the teacher should center the attention on the segmental sounds of the word, without making emphasis on its meaning. The students should realize at the end of the exercise which phonemes are present and start articulating them in a proper way despite being adapted into their L1.

Students who are phonemically aware can unpack a spoken word into its constituent sounds, telling that the spoken word *sofa* consists of four separate sounds: /s/ /o/ /f/ /a/. They can blend individual sounds into words; that is, they respond with *zoom* when asked what word these three sounds form when combined:

/z/-/u/-/m/. Matching, identifying, and deleting phonemes from spoken utterances are also indicators of phonemic awareness.

Deficits in phonological awareness cause reading problems in three key ways: first, in order to learn to translate oral language to print, the student must be sensitive to the internal structure of words; the sounds within each word. If he is unable to hear those individual phonemes, the alphabetic principle (i.e., how print translates to speech sounds) that underlies our system of written language will never make sense (Chard and Dickson, 1999). Students who possess phonological awareness can pick off and think about the sounds in spoken words, which helps them remembering the correspondence between sound and symbol as they learn about letters of the alphabet. When students have this awareness, they discover ways in which spoken language is encoded by print becomes meaningful (O'Connor et al., 1993).

Second, students with lower phonological awareness find it hard to remember which letter represents which sound. This difficulty with phonological decoding can lead to misreading words. If word-reading errors are not corrected, reinforced incorrect print-to-sound associations will become permanent and interfere with the student's attempts to read similar words later (Olson et al., 1994).

Third, poor phonological skills can indirectly affect reading comprehension. If a student misreads important words in a passage, he may miss the main ideas being relayed. Also, if the reader is spending excessive energy trying to decode each word of a sentence, his comprehension will be jeopardized (Olson et al., 1994).

CONCLUSIONS

Most loanword adaptations change the shape of foreign words in order to make them fulfill the phonological structure of the borrowing language. Within output-oriented phonological theories, the same pressure is held responsible for the transformations of underlying forms during the mapping onto surface forms in the native phonology.

Language development research shows extensive investigations on phonological awareness, yet most of them have concentrated on the L1 acquisition. In the field of foreign language teaching, teachers assume that explicit instruction of the L2 phonological system might facilitate and subsequently foster the learning process. Piasta and Wagner (2010) state that the explicit instruction of phonological awareness, combined with grapheme-phoneme instruction, facilitates the acquisition of alphabetic principle and the correct development of phonological abilities.

In this paper, the authors have discussed the various phonological processes that English words go through during their absorption into the lexicon of Spanish as a result of borrowing. The main objective of the study was to examine the phonological changes and provide an insight for teachers to raise phonological awareness in L2 using loanwords, which is a way to relate both languages in the EFL classroom.

The authors of this research found that Spanish speaking first-grade individuals, with good command of phonological awareness, can read English words with better pronunciation than students who were roughly familiar with English phonetic features. Thus, phonological awareness significantly predicts vocabulary recognition performance both "within and across languages"

Adaptations that are in conflict with some native alternation of the borrowing language and phonotactically 'unnecessary' adaptations are highly problematic for analyses of loanwords that derive the adaptations within the phonological grammar of the borrowing language.

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