

Problematic Phonemes for Spanish-speakers' Learners of English¹

Fonemas problemáticos para los hispanohablantes que aprenden inglés

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Abstract

When learning English, learners might face a challenging task in mastering pronunciation due to differences in both languages such as sound-to-letter correspondence, size of phoneme inventory, allophonic realization of sounds, place and manner of articulation, among others. Therefore, the purpose of this paper is to review both theoretical and research reports on the most problematic sounds for Spanish-speakers English language learners. Approaches to second language learners' errors like Contrastive Analysis and Error Analysis although being criticized have contributed to identifying likely causes of errors and dealing with them whether anticipating them or providing appropriate feedback on them. Besides, first language interference and age of second language acquisition have been found as complicating factors in the English pronunciation learning process. Finally, some classroom activities have been reported as successful for facilitating English pronunciation in Spanish native speakers.

Key words: English pronunciation; Spanish native speakers; Contrastive Analysis; Error Correction; Interference; pronunciation activities

Resumen

A la hora de aprender inglés, los aprendices pueden encontrar dificultades con respecto a la pronunciación puesto que existen ciertas diferencias en los dos idiomas, tales como la correspondencia de sonido a letra, el tamaño del inventario de fonemas, la realización alofónica de sonidos, el lugar y la forma de articulación, entre otros. Por

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lo tanto, el propósito de este documento es revisar literatura teórica e investigativa sobre los sonidos más problemáticos para aprendices de inglés que son hablantes nativos de español. Aproximaciones a los errores de los aprendices de una segunda lengua, como el Análisis Contrastivo y el Análisis de Errores que, aunque han sido criticados, han contribuido a identificar las posibles causas de los errores y abordarlas, ya sea anticipándolos o proporcionando una retroalimentación adecuada. Además, la interferencia de la lengua materna y la edad de adquisición del segundo idioma se han encontrado como factores que dificultan el proceso de aprendizaje de la pronunciación en inglés. Finalmente, algunas actividades de clase han sido reportadas como exitosas para facilitar la pronunciación del inglés a hablantes nativos de español.

Palabras clave: pronunciación en inglés; hablantes nativos de español; análisis contrastivo; corrección de errores; interferencia; actividades de pronunciación

Resumo

Na hora de aprender inglês, os aprendizes podem encontrar dificuldades com relação à pronúncia, posto que existem certas diferenças nos dois idiomas, tais como a correspondência de som da letra, o tamanho do inventário de fonemas, a realização alofônica de sons, o lugar e a forma de articulação, entre outros. Portanto, o propósito deste documento é revisar literatura teórica e investigativa sobre os sons mais problemáticos para aprendizes de inglês que são falantes nativos de espanhol. Aproximações aos erros dos aprendizes de uma segunda língua, como a Análise Contrastiva e a Análise de Erros que, mesmo que têm sido criticados, têm contribuído a identificar as possíveis causas dos erros e abordá-las, seja antecipando-os ou proporcionando uma retroalimentação adequada. Além disso, a interferência da língua materna e a idade de aquisição do segundo idioma tem se encontrado como fatores que dificultam o processo de aprendizagem da pronúncia em inglês. Finalmente, algumas atividades de aula têm sido reportadas como bem sucedidas para facilitar a pronúncia do inglês a falantes nativos de espanhol.

Palavras chave: pronúncia em inglês; falantes nativos de espanhol; análise contrastivo, correção de erros; interferência; atividades de pronúncia.

Introduction

Learning English as a second language (ESL³) involves, as any language, the development of the four basic skills, writing, reading, listening and speaking, and the four systems, grammar, lexis, discourse, and phonology. In communication, which is the ultimate goal of using a language, the phonological system plays a significant role. One of its components, pronunciation determines how intelligible messages are so that they can be understood by their interlocutors; as stated by Fangzhi (1998, p.39): “good pronunciation is closely linked with clear oral communication”.

Pronunciation is concerned with how sounds are put together in the flow of speech (Boyers, S. 2002, p. 1). More specifically, pronunciation refers to the production of sounds that we use to make meaning (AMEP, 2002, par. 2). Therefore, having a good pronunciation is fundamental for conveying a clear message. Nonetheless, mastering a proper English pronunciation can constitute a big problem for ESL learners as there are some factors that cause difficulties in the learning of pronunciation. For example, the first language (L1) highly influences the degree of difficulty learners may face during the development of the second language (L2) spoken ability as stated by Manrique (2013 as cited in Denizer, 2017, p. 40): “mispronunciation ... errors are the most common types of interference between the mother tongue and the target language”.

Another example has to do with two features of the English language that hinder the pronunciation learning process of English learners. The first particularity is that the English sound system possesses unique sounds that are not common to those belonging to Romance, Sino-Tibetan, and Arabic linguistic families. The second singularity is that English does not have one-to-one grapheme-phoneme correspondence. It means that each English sound can have more than one phoneme realization depending on its syllabic position. Besides, as all other languages, English has various accents and phoneme realizations depending on the country in which it is spoken (Oxford Royal Academy, 2014, par. 2-13). For example, while American people pronounce the word ‘car’ like /kær/, British people pronounce /ka:ːr/ since the /r/ is silent in this position. In addition, authors such as Case (2012), Hernandez, Gonzales and Algara (2011) and Valenzuela (n.d) agree that L2 learners are prone to mispronounce consonant clusters in initial and final positions, to confuse short and long vowels, and to interchange fricative and affricate sounds. Additionally, learners read the words as they are written due to the sound-letter or phoneme-grapheme correspondence in their L1, and they mispronounce not only occlusive sounds in initial position but also diphthongs.

3 ESL is used in this paper as an umbrella term for both ESL and English as a foreign (EFL). EFL is used only when needed to specify the learning context.

Regarding the teaching of pronunciation, there are some singularities that EFL teachers must take into account in order to assist their Spanish-speaking students in achieving satisfactory English pronunciation and successful communication (Griffiths, 2004). Firstly, they have to be aware of the students' L1 phonetic system interference. Secondly, they need to be aware that it is problematic for Spanish-speakers, for example, to adjust their speech organs (velum, tongue, lips, alveolar ridge etc.) to the exact English articulatory movements (Axelrod, 1974). Thirdly, teachers should have a clear understanding of how pronunciation works and needs to be taught (Kelly, 2000). Teachers, who are knowledgeable in these matters, are more likely to "enable learners to surpass the threshold level [i.e. minimum level of language domain] so that their pronunciation will not detract from the ability to communicate" (Celce-Murcia, 1996, p. 8). However, pronunciation has been neglected in L2 instruction regardless its major role in effective communication: "Despite the fact that acquiring pronunciation is so difficult, in many L2 classrooms, teaching pronunciation is granted the least attention" (Gilakjani, 2011, p.1).

English learners' pronunciation problems is a topic worth-discussing. Therefore, the purpose of this paper is to review some theoretical and research literature related to English pronunciation of ESL speakers with a focus on Spanish native speakers. The information gathered was classified in three major themes. The first one discusses the most problematic phonemes or sounds from the theoretical perspective of Contrastive Analysis and Error Analysis. The second one examines the factors that affect learning pronunciation such as interference and age. Finally, the third one addresses activities to improve learner's pronunciation such as reading out-loud and flipped learning.

This revision is relevant for ELT scholars interested in segmental phonetic analysis. They might find some theoretical guidelines to gain awareness of the variety of problems that could arise regarding the pronunciation learning process of ESL learners. This information will encourage them to approach the teaching of pronunciation in a more strategic, practical and better informed way.

Problematic Sounds

Contrastive Analysis (CA) considers language from a structural point of view and emerged as a tool to predict L2 items that language learners would find easy or difficult to master because of being similar to or different from their L1. Thus, in practice, by identifying problematic L2 elements, errors could be prevented (Lado, 1957). Error Analysis (EA), another approach to errors, focused on language as developed by learners through hypothesis formation and testing. Therefore, errors are developmental and promote language learning (Corder, 1967).

Contrastive analysis

CA is firstly developed and practiced by the American Linguist Robert Lado in the 1950's and 1960's in order to facilitate L2 learning by preventing errors. He compares learners L1 and L2 to identify language items that are similar or different between the two languages. He argues that all kind of errors in the L2 are caused by those L2 elements that differ from the learners L1. Consequently, errors can be anticipated and avoided if such differences are noticed. Thus, he claims that errors produced by learners are the result of L1 negative interference. However, later in 1981, the professor and linguist Jacek Fisiak, states that “there are psychological, pedagogical and extra linguistic factors that contribute to the formation of errors” (as cited in Khansir, 2012, p. 1028). Thus, there are some intralingual and developmental causes such as simplification, overgeneralization, hypercorrection, faulty teaching, fossilization, avoidance, and inadequate learning (Touchie, 1986, p. 78).

CA has been strongly criticized for: first, being used merely for analyzing the language selectively and superficially focusing on phonological, grammatical and certain lexical items; second, analyzing those three systems as discrete and hierarchical with grammar at the highest level; third, its structural approach to language where items are linear and should be learnt from simple to complex and through repetition; fourth, associating all L2 errors to L1 interference so that excluding developmental errors caused by learners' experimentation with the L2; fifth, affirming that language difficulties always lead to error and therefore, ignoring the psycholinguistic factor in language learning, and sixth for wrongly predicting errors (Lennon, 2008)

Notwithstanding, CA seems to “work best in predicting phonological error” (Lennon, 2008, p.54). Consequently, nowadays, CA is used to compare two linguistic systems focusing on grammar and phonological systems of languages in order to predict second language problems (Richards & Smith, 2002, and Fang & Xue-mei, 2007, as cited in Sompong, 2014). Following this new practical and theoretical trend, there are some authors who have applied CA to study the differences in the phonological systems of Spanish and English regarding the production, perception and realization of sounds. For example, authors such as Valenzuela (n.d), Frankfurt International School (n.d.), Coe (2001), and Torres (2007) claim that the most notorious difference between the Spanish and English phonological systems lies in their number of vowels, diphthongs and consonants. In the English system there are twelve pure vowels, eight diphthongs and twenty-four consonants. In contrast, in the Spanish language there are five pure vowels, five diphthongs and nineteen consonants. Focusing on vowels, Coe (2001) affirms that:

[Spanish-speaking English] learners find difficulty in differentiating between English vowels, especially when length is a part of the

difference. Typically, at least two English vowels share the ‘phonetic space’ occupied by one Spanish ...vowel, so one-to-one correspondences are practically impossible. (2001, p. 91)

In order to clarify this, Finch and Ortiz as cited in Gallardo del Puerto & Gómez (2008) claim that since the articulatory movements of the Spanish-speakers are accustomed to specific tongue, lips, jaw movements as well as mouth-opening, these learners associate the existing vowel sounds of their L1 when producing the vowel sounds of the TL as it is exemplified in Table 1. Considering consonants in English and Spanish, Coe (2001) reminds us that there are some Spanish phonemes which share characteristics in the place and manner of articulation with English phonemes as seen in the circled phonemes in Table 2.

Table 1. Spanish-speakers’ interpretation of English Sounds

English vowel	Produced as Spanish vowel
/i:/ - /I/	/i/
/e/ - /3:/	/e/
/Ü/ - /a:/ - /æ/	/a/
/ʊ/ - /u:/	/u/
/ɒ/	/o/
/ə/	/e/ - /a/

Note. Information taken from Finch and Ortiz cited in “Lira La enseñanza de las vocales inglesas a los hablantes de español”, by Gallardo del Puerto, F. and Gómez, E. Revista Pulso CUCC, pp. 47-48

Tabla 2. Similar phonetics in English and Spanish

		PLACE OF ARTICULATION							
		Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar	G
MANNER OF ARTICULATION	Plosive	p b			t d			k g	
	Fricative		f v	θ ð	s z	ʃ ʒ			
	Affricate					tʃ dʒ			
	Nasal	m			n			ŋ	
	Lateral approximant				l				
	Approximant	w					r	J	

Note. Adapted from “English Phonetics and Phonology, by Peter Roach (2012, p. 52).

However, there are some other sounds which are completely different in both languages and therefore hinder the pronunciation of the English learners. To illustrate this, Cala (1997), Valenzuela (n.d), Valero (2010), and Coe (2001) state that English initial voiceless plosives /p/, /t/, /k/ are not aspirated in Spanish, so they often sound like /b/, /d/ and /g/ to English ears as in the case of *bill* and *pill*. Coe (2001) explains that since in Spanish word-final plosives are rare, Spanish speakers tend to use /t/ for final /d/ (e.g. /sæt/ instead of /sæd/, /k/ for final /ŋ/ (e.g. /sɪŋk/ instead of /sɪŋ/) and /p/ for final /b/ (e.g. /ba:p/ instead of /ba:b/) . Regarding pairs of sounds, Gonzales (2012), Valenzuela (n.d), and Coe (2001) agree on the fact that Spanish-speakers are prone to give English /b/, /d/ and /g/ their mother tongue values, which vary according to the context. Between vowels, these sounds are softer continuous sounds, not stops. For example, in the word *adapt* /əˈdæpt/ the phoneme /d/ is not articulated as plosive. Concerning the particular phoneme /ŋ/, Cala (1997) asserts that this sound is found generally in medium position in Spanish, while in English it is found most of the times in final position.

In addition, the fricative and affricate phonemes happen to be problematic for the Spanish-speaking English learners. On the one hand, the phonemic inventory of both languages shares the sounds /f/, /ð/, /s/ and /h/ (Centeno & Anderson, 2007). On the other hand, there are some others like /z/, /ʃ/, /v/, /θ/, /z:/, /ʃ/, /z:/, and /dʒ/ which either can differ in manner and place of realization or are inexistent in Spanish (Frankfurt International School, nd; Valero, 2010 and Coe, 2001). To exemplify the later, in Latin-American Spanish the phoneme /z/ does not exist; thus, learners tend to interchange /z/ by /s/ in English (Coe, 2001); for instance, they will pronounce /su:m/ for ‘zoom’ instead of /zu:m/.

Regarding the liquid phonemes /r/ and /l/, they have particular features in English and Spanish. In the case of /r/, Perez (2011), Gonzales (2012), Cala (1997), Steward (1971), and Centeno & Anderson(2007) compare place of articulation, manner and syllabic position in both languages. The sound /r/ in Spanish can be voiced, alveolar, and vibrant simple or multiple depending on the syllabic position. That is, if the sound /r/ is found as *vowel+/r/+vowel*, it is vibrant simple, as in the case of *cara* [ˈkara]; in contrast, if it is found as *consonant+/r/+vowel* and in initial position, it is vibrant multiple as in *Israel* [israˈel]. On the other hand, the sound /r/ in English is retroflex, post- alveolar approximant in almost all syllabic contexts. Concerning the sound /l/, Gonzales (2012) says that in English there are two kinds of /l/: dark and light, while in Spanish this sound has three different allophones depending on the context in which it is placed. That is to say, in Spanish, it is produced as dental before /t/ and /d/, alveopalatal before /tʃ/, and palatal before /k/ and /i/ as in the words *alto* [ˈalto] ,*colchón* [ˈkoltʃon] and *llama* [ˈla ma] respectively.

Another difference between the Spanish and English phonological systems has to do with clusters, which are defined as “a sequence of two or more consonants at the beginning of a syllable (e.g. /spl æʃ/ in *splash*) or the end of a syllable (e.g. /sts/ in *tests*)” (Richards & Schmidt, 2002, p.110). Concerning Spanish, Gonzales (2012, p.9) shows the tendency to break clusters into syllables. For example: *en-ci-ma*; *in-cre-í-ble*, *ins-pi-rar*, *ins-tru-ment*.

However, from Coe’s (2001) point of view, consonant clusters in Spanish as well as in Catalan occur less frequently than in English, at least in initial position. Adding to this, Gorman and Kester (n.d) conclude that English /sp/, /sk/ and /st/ initial consonant clusters can only occur in Spanish if preceded by the letter “e” like in *espacio* [es’paθjo], *escalera* [eska’lera] and *strella* [es’treλa].

In conclusion, it seems that CA is a method that helps linguists to highlight the language differences and/or possible problems in aspects such as: morphology, phonology, and syntax. For example, when English and Spanish is compared, the authors mentioned above, which focused their studies on phonology, determined that factors such as isolated sounds, consonant clusters, fricatives, affricates, and liquid phonemes cause difficulties to L1 Spanish speakers in mastering the pronunciation of English.

Error Analysis

Error Analysis (EA) “deals with the systematic and methodical collection and documentation of second language (L2) errors in learners’ language production” (Hinkel, 2018, p.1) and directs attention to the communicative nature of language as focuses more on errors in language-production processes (Ellis in Hinkel, 2018). Also, it is related to language pedagogy as “Studying the errors made by learners of a second language... is something which teachers have always done for purely practical reasons” (Corder, 1981, p.35).

In the 1960s, EA is proposed as an alternative to CA. It focuses on L2 errors that cannot be attributed to L1 negative interference and that are more related to the L2. According to EA, L2 learners’ errors show their language development and progress, indicate the way learners learn the language in terms of strategies and prove learners themselves that language learning is taking place. Thus, EA argues that errors are natural in language learning and are caused by learners’ experimentation (inferences or hypothesis) with the L2, and that they are essential for language gradual development. Another tenet of EA is that L2 learners follow a universal order of language acquisition and that areas of difficulties in L2 are common to learners (Corder, 1981). Besides, EA differentiates mistakes from errors: the former seen as non-systematic errors of performance (lapses or slips) which do not have to do with language knowledge, and the latter which are systematic and show learners’ language knowledge at a certain point in time; errors tell what learners have not learnt

yet (Corder, 1981, Corder in Hinkel, 2018; Norrish, 1983 in Sompong, 2014). EA focuses on errors rather than mistakes and its followers have proposed different taxonomies of errors, some regarding the language systems (grammar, phonology, lexis, and discourse) and the type of alteration made to the surface structure of the language (Dulay, Burt & Krashen, and James in Sompong, 2014; Ellis, 1994); others based on the cause of the error (James; Norrish; Richards in Sompong, 2014).

Even though EA first, focuses more on the learner as a language processor and user, second, places more importance to the communicative function of the language, and third, has more pedagogical uses, it has received criticism. The major problems arise when: identifying and classifying the errors, differentiating errors from mistakes, determining the cause of the error, and assuming that the language learners use in production is all the language they know (Lennon, 2008; Hinkel, 2018).

Hashim (as cited in Sompong, 2014) suggests that one of the causes of errors, according to EA, is the quality of L2 instruction. To this respect, Corder (1981, 1983) argues that language teachers need to identify and provide appropriate feedback on errors whether in language learning situations or language use contexts: “errors and their analyses shed light on the areas of learning difficulty that can be useful for both language teachers and language learners. Being able to identify these can assist in instruction, with targeted practice and focused teaching.” (Dulay, Burt & Krashen as cited in Hinkel, 2018, p.2). Some studies have used EA to help Spanish speakers improve their L2 pronunciation (Castillo, 2016; Goswami & Chen (2010); Vera, 2014).

The authors referenced above use a similar methodology. They start hypothesizing a set of problematic English sounds for each specific Spanish-speaking group of participants. Then, they apply a pre-test in which the phoneme pronunciation accuracy of the learners is measured. After that, instruction is provided: the researchers explain through workshops either a specific set of phonemes, or the whole International Phonetic Alphabet (IPA). Finally, they use a post-test to verify if there is any improvement in the learners’ pronunciation after having received instruction.

As already mentioned, the quality of instruction may facilitate or hinder L2 pronunciation learning. For example, Castillo (2016) conducts an interview in order to find out about the most problematic phonemes for learners. Learners claim to have difficulties in the production of English vowel sounds such as: /ə/, /ɜ:/, /æ/, and /i:/. After doing the pre-test, and having learned the IPA, the learners take the post-test to observe if there is any progress in their pronunciation of these sounds. As a result, the author finds that the instruction is not effective enough as the learners continue having problems differentiating the length of the target vocalic sounds.

In another study, Goswami and Chen (2010) choose the English sounds /t/ /d/, /v/, /z/, /ð/, /θ/ and /ʃ/ as the set of problematic phonemes for Mexican Spanish-speakers. The participants are divided into an experimental and a control group. The experimental group take the pre-test and then receive instruction in differentiating target sounds while the control group have regular English classes. As a conclusion, the authors claim that instruction in segmental features result in a significant improvement in the production of the L2 sounds in the experimental group.

Finally, Vera's research, studies the perception and production of the English vowel "schwa" by Spanish speakers. She conducts an experimental study in which the control group is formed by English-native speakers, and the experimental group, by Colombian English learners. She sets a pre-test to evaluate the abilities of the Spanish-speakers to produce and recognize the /schwa/ before the intervention. Then, she provides the Colombian learners with instruction in discriminating and articulating the target language sound. Finally, she administers a post-test from which she concludes that the experimental group shows a higher improvement in the perception of the "schwa" rather than in its production.

To conclude, instruction is one of the aspects to consider when carrying out EA in order to identify problematic phonemes of L2 students. However, it does not always provide a major impact on the pronunciation proficiency level of the learners. As Touchie(1986) argues, one of the causes of learners' pronunciation errors might be related to the teacher approach and the teaching materials.

Factors affecting pronunciation learning

There are several factors that influence the learning of pronunciation. According to Kenworthy (1987), the major ones are: L1, age, amount of exposure to the L2, phonetic ability, attitude and identity, and motivation and interest in having a good pronunciation. In this section only studies related to L1 interference and age are presented. These two aspects have been widely discussed in the field of L2 learning and are still very debatable.

Interference

Interference or negative transfer is the influence one language has on the learning process of another language, which causes difficulties or leads to errors. However, transfer can be positive or facilitative when the languages involved share features. Language transfer has been approached from different views of language learning and therefore, its meaning has changed overtime. For

example, if considered from a behavioristic point of view, negative L1 transfer is the major cause of L2 errors as seen in CA, but if seen from a cognitive perspective, transfer is part of the L2 learning as learners do not build their L2 from the scratch but instead use any knowledge at their disposal, including the L1 (Selinker as cited in Ellis, 1997). Transfer can occur consciously or unconsciously and can be triggered by factors such as the learning setting and the learner's proficiency and characteristics (Benson, 2002).

Some research has been done on transfer in the phonological system. For example, regarding phonological differences between Spanish and English, Gallardo del Puerto and Gomez (2008) highlight the fact that phonemes in English and Spanish are realized in different place and manner of articulation. For example, the sound /r/ is approximant post-alveolar, while in Spanish it is vibrant (multiple or simple) alveolar. In brief as Axelrod (1974) states, Spanish-speaking learners of English need to adjust their speech organs to the exact English articulation movements in order to realize the phonemes properly.

Another factor that creates interference in the intelligible English pronunciation of the Spanish speaker is the orthographic representation of the words. In English, there is not one to one phoneme-grapheme correspondence as there is in Spanish. An explanation of this phenomenon could be the fact that English has a richer vocalic system in which the twelve vowel sounds can correspond to at least 70 orthographic representations (Finch & Ortiz as cited in Gallardo del Puerto & Gómez, 2008).

Finally, Mayordomo (2013) find some pronunciation problems in Spanish-speakers' production coming from the phonological differences between the Spanish and English sets of phonemes. Firstly, they notice a tendency among the learners to produce vowels and diphthongs in English as they are produced in Spanish (e.g. /i/ instead of /ɪ/ or /i:/, /a/ instead of /æ/). Secondly, they identify that Spanish-speakers pronounce the 'friend words' as exactly as they are pronounced in Spanish language (e.g. /'alkɔ:l/ instead of /'æɪ.kə.həl/).

Clearly, there are differences that produce interference in the L2 learning process. This happens because the learners are prone to use the familiar sounds and patterns of their L1 in the L2. However, there are ways to overcome this difficulty such as giving explicit instruction in articulation and training learning in sound perception, minimal pairs and orthographic representation (Wells, 2000).

Age

In the case of the age factor, it has been considered a determining factor for developing native-like L2 competence; but, there is still neither agreement

on a certain chronological age when it is not possible to fully acquire the L2, nor on whether it proportionately affects all language areas. For instance, some linguists following the Critical Period Hypothesis (CPH) argue that when brain lateralization is finished during puberty, skills for language learning are not naturally and easily available (Penfield & Robert as cited in Kirkman, n.d., p. 3; Lenneberg as cited in Harley & Wang, 2014). A different view is supported by Johnson and Newport (as cited in Harley & Wang, 2014, p.22) who argue that such language learning capacity reduces or disappears with maturation only if it is not exercised.

Regarding pronunciation, Kuhl (2010) and Dekeyser (2012) suggest that not all language areas are affected to the same extent, but the phonological and lexical systems need more effort to be developed and might not reach the native-like level. Barlow (2014) in her study with 38 male and female college students aged 20, analyzes the influence of the phoneme /l/ with both early (learn the L2 before 5 years old) and late (learn the L2 after 6) Spanish-English bilinguals, 11 and 14 respectively, and a group of 13 English monolinguals for English pronunciation reference. The two bilingual groups evidence balanced exposure and use of both languages, even though English input and output is a bit greater as they study in a dominant English-spoken institution. Findings reveal that: first, both early and late Spanish-English bilinguals acquired the English /l/ pronunciation with subtle influence of the Spanish /l/; such influence is slightly stronger in late bilinguals. Second, late bilinguals Spanish /l/ is influenced by English /l/ which proves that there is a bidirectional L1 and L2 influence. Third, age have an incidence in the sound production of bilinguals'; the older the learners, the greater the influence.

Another study by Major (2014) conducted with 38 Spanish native speakers aims to determine the influence of cognitive, affective and demographic factors in the participants' L2 proficiency. Results related to age (included in the demographic aspects) indicate that the younger the subjects were when they started to learn English, the higher the proficiency they have achieved. The author explains this finding in terms of the experience using the language: younger learners have had more L2 practice opportunities.

The age factor is one of the most controversial topics in second language acquisition (SLA). Whether or not there is a specific time in the physical and linguistic development of human beings after which a new language cannot be fully learned is still under debate. However, there are some researchers such as Marinova-Todd (as cited in Pinter, 2012) that claim that it is not age per se what affects L2 language learning but other factors such as exposure, practice time, learners' disposition and quality of instruction mainly in English as a foreign language (EFL) contexts.

Activities to help learners improve pronunciation

Teaching pronunciation has been neglected by teachers as they approach it mostly in a reactive way when mispronunciation is noticed (Griffiths, 2011). However, some books (Hancock, 2000; Hewings, 2004; Kelly, 2000; Kenworthy, 1987) and papers (Huang, 2010; Ramírez, 2018) provide different activities to include pronunciation in the regular English classes.

Reading out-loud

Reading out-loud (i.e. loud enough to be heard) is a method that has been implemented in L2 teaching in order to improve student's oral production. There exist many attempts to define the concept of oral reading; however, Huang (2010) calls our attention at defining reading out-loud as "a kind of comprehensive practice of pronunciation ... [which] can help [students] to overcome the faults of disfluency, repeat, improper pause, and develop natural and good pronunciation habits" (p.149). Thus, teachers can use reading out-loud to help students to develop and improve their oral fluency. Also, teachers use it in order to identify student's pronunciation mistakes and give them appropriate feedback to avoid fossilization (Tost, 2013). Some examples of the use of this method are the studies by Cabrera and Lara (2014) and Hernandez, Gonzales and Algara (2011) who have implemented reading out-loud for identifying pronunciation errors in Spanish-speaking English learners.

In their study, Cabrera and Lara (2014) claim that Spanish-speakers are prone to confuse and mispronounce the affricate /tʃ/, /dʒ/, the alveolar /d/ and the fricative /ʃ/, /ʒ/ phonemes since they have many orthographic representations. In order to analyze whether these phonemes are problematic or not for a group of Spanish- speakers, the researchers ask the learners to read aloud a list of words, a list of sentences and one paragraph where these phonemes appear randomly. They conclude that first, the context provided by text-fragments and long sentences facilitate the realization of the target sounds effectively as compared to the production of the sounds in isolated words, and second, that the written English forms causes difficulties in reception and production of English in Spanish native speakers. Finally, the authors suggest using reading out-loud to help learners link sounds to spelling.

In the second, Hernandez, Gonzales and Algara (2011) hypothesize that the English fricative alveolar /s/ and /z/ are challenging sounds for Spanish speakers from Venezuela as in Latin America Spanish native speakers do not make the oral distinction between the sounds /s/ and /z/ in their L1; therefore, they transfer this phonological feature to English. In order to prove the hypothesis, the learners read aloud a set of words both isolated and contextualized. The authors find that: firstly, the sound /z/ was predominantly

devoiced by Venezuelan English learners; secondly, there is a tendency to interchange the consonant sounds /z/ and /s/ with the glottal /h/. For example, the words same /seim/, second /'sek.ənd/ are pronounced as /heim/ /'hek.ənd/.

These fricative, affricate and alveolar phonemes are identified as the most problematic sounds not only for Venezuelan Spanish speakers but also for Spanish native speakers from different nationalities such as: Catalan, Mexican, Spanish and Costa Rican (Centeno & Anderson, 2007; Kalhousová 2014, Pizarro & Cordero, 2015; Coe, 2001; Steward, 1971).

In conclusion, reading out-loud contributes to identifying problematic sounds and developing fluency. Consequently, pedagogical activities can be done to address specific pronunciation problems in the classroom.

Flipped learning

Bergmann and Sams (2012) define flipped learning as an alternative teaching approach that aims at catering for individual learners' needs by moving the delivery of content in the classroom to the individual learning space, which makes possible to personalize education. Thus, class time is devoted to more practical and experiential activities where learners can apply the content knowledge. While putting theory into practice learners test their own hypothesis, clarify doubts, make new inferences and develop their critical thinking skills (FLN, 2014).

Ramírez (2018) conducts a case study research with 10 in-service Colombian teachers of English in order to determine the effectiveness of a blended course to train the teachers in how to teach pronunciation. The researcher uses surveys, pre and post recordings, interviews, participants and teacher's diaries, and lesson plans to gather information. Besides, she implements flipped learning as one of the pedagogical approaches for running the course. Findings show that these teachers, Spanish native speakers, improved both their English pronunciation (mainly consonants and linking) and their pronunciation teaching skills. The author recommends Flipped Learning as a tool for promoting situated learning as learners can put into practice the content studied.

Karaoke

Renfijo (2009) did an action research with 15 adult Spanish native speakers learning English to determine the effectiveness of the Japanese singing activity, Karaoke, in helping the participants to improve their pronunciation during their classes. The researcher carries out activities such as discussing the meaning of the song, comparing English accents, minimal pairs

discrimination, matching sound to written form, among others to get learners to notice L2 pronunciation features. He also uses observations, interviews and tests to collect information. Findings show that Karaoke is effective not only to reach a better pronunciation but also to improve spoken English in general.

The authors recommend integrating pronunciation as a natural component of the English learning process and raising awareness of its importance in communication.

Conclusions

As the purpose of this paper was to review some existing literature related to the pronunciation of ESL learners especially Spanish native speakers, the following conclusions were reached: Pronunciation plays an important role in the L2 learning process since oral messages must be intelligible for effective communication to take place (AMEP, 2002). Although CA has been criticized due to its superficial approach to language, it allows researchers to compare two linguistic systems in order to identify potential problems L2 learners might experience in both sound perception and production (Sompong, 2014). Specifically, when comparing Spanish and English, the most notorious differences that makes pronunciation challenging for ESL Spanish native speakers are: the sound-letter correspondence in English but absent in Spanish and the bigger number of vowels, diphthongs and consonants in English.; in both languages, a set of phonemes share characteristics in place and manner of articulation while some others either do not exist or do not have exact correspondence (Coe, 2001; Torres, 2007; Valenzuela, n.d). In addition, error analysis permits both to identify the problems that L2 learners face and to help teachers develop strategies for improving pronunciation. Nevertheless, it was evidenced that the pronunciation instruction does not have a significant impact on learners' production in the short term, and unless it is systematic. Thus, it is important to highlight the fact that the quality of the instruction affects positively or negatively L2 learners' oral production (Castillo, 2016; Goswami & Chen, 2010; Sompong, 2014; Vera, 2014). L1 plays a crucial role SLA. L2 learners resort to their L1 knowledge to deal with gaps in L2 knowledge which might cause negative transfer or interference leading to production mistakes and poor speech intelligibility. However, interference can be dealt with through explicit training in articulation, sound perception, minimal pairs and orthographic representation (Gallardo del Puerto & Gómez, 2008; Wells, 2000). Although the role of age in SLA is still controversial, the CPH has found evidence of early L2 learners' more successful pronunciation management (Barlow 2014). However, some research affirms that age is not determining per se, but the time of language exposure, continuous practice and quality of instruction in EFL contexts that account for better L2 pronunciation in early L2 learners (Johnson

& Newport as cited in Harley & Wang, 2014). There are some strategies for helping L2 learners improve pronunciation. For example, reading out-loud has two main purposes. On the one hand, it helps learners to practice and improve their oral production. On the other hand, it provides teachers with a benchmark to establish what the most difficult sounds for the students are. Also, it allows teachers to provide appropriate feedback in order to avoid fossilization. Thus, teachers can develop strategies and/or materials to overcome learner's pronunciation difficulties (Huang, 2010; Tost, G, 2013). A second way is to implement flipped learning where learners improve their language by working both individually and group through developing their autonomy and critical thinking skills (Ramírez, 2018). Another strategy is integrating Karaoke in classes so learners can pay attention to formal phonological aspects such as: discrimination and realization of specific phonemes (e.g. minimal pairs), and/or discrimination of sounds by accent. Also, they can improve lexis and fluency (Rengifo,2009). Finally, further research should be done regarding important factors in L2 pronunciation. For example, awareness-raising of the major role of pronunciation in communication, approaches and strategies to improve the quality of pronunciation teaching and learning, the role of pronunciation in English as lingua franca and the respect for *Englishes*, and some other aspects that affect the way L2 pronunciation is approached in ELT.

References

- AMEP Research Center. (2002). Fact sheet – What is pronunciation? Retrieved from: <http://www.ameprc.mq.edu.au>
- Axelrod, J. (1974). Some Pronunciation and Linguistic Problems of Spanish-Speaking Children in American Classrooms. *Elementary English*, 51 (2), 203-206. Retrieved from <http://www.jstor.org/stable/41388191>
- Barlow, J. (2014). Age of acquisition and allophony in Spanish-English bilinguals. *Frontiers in psychology*, vol. 5, article 288. Pp. 1-14
- Benson, C. (2002). Key concepts in ELT: Transfer / Cross-linguistic influence. *ELT Journal*, Vol. 56/1.
- Bergmann, J. & Sams, A. (2012). *Flip your classroom*. USA: International Society for Technology in Education
- Bhela, B. (1999). Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage *International Education Journal* (1)1. Retrieved from: <https://ehlt.flinders.edu.au>
- Boyers, S. (2002). Introduction to English pronunciation- Teacher's notes. Eds. Susan Boyer & Leonard Boyer. *Understanding English Pronunciation: An Integrated Practice Course*.p.1.
- Bradlow, A. (1993). A cross-language comparison of vowel production and perception: language-specific and universal aspects. *Working papers of the Cornell Phonetics Laboratory*, 8, 29-40. Retrieved from: <http://conf.ling.cornell.edu>
- Byrne, R. (2011). English is a Germanic language. What does it mean and how true is it? *Innervate* (3). University of Nottingham. Retrieved from: www.nottingham.ac.uk
- Cabrera, D. & Lara, M. (2014). *Representación ortográfica de los sonidos consonánticos alveopalatales en inglés y su producción oral en la lectura en voz alta por estudiantes de la asignatura Desarrollo Fonológico II de la mención inglés del Departamento de Idiomas Modernos de la Facultad de Ciencias de la Educación de la Universidad de Carabobo* (Tesis de grado, Universidad de Carabobo, Venezuela). Retrieved from: <http://mriuc.bc.uc.edu.ve>
- Cala, R. (1997). Dos sistemas cara a cara. Universidad de Barcelona. Centro virtual de Cervantes. *Acta VIII.*, 221-225. Retrieved from: <http://cvc.cervantes.es>

- Case, A. (2012). Pronunciation problems for Spanish-speaking learners of English [Blog post]. Retrieved from: <https://www.tefl.net/elt> [Accessed April 8th, 2017].
- Castello, D. (2015). *First Language Acquisition and Classroom Language Learning: Similarities and Differences* (Master of Arts thesis) [online]. Retrieved from: <http://www.birmingham.ac.uk>
- Castillo, J. (2016). *Mejoramiento de la pronunciación de la lengua inglesa de los estudiantes de primer semestre del programa de lenguas extranjeras de la Universidad Santiago de Cali a través de la enseñanza de la fonética* (Tesis de maestría, Universidad del Valle, Colombia). Retrieved from: <http://bibliotecadigital.univalle.edu.co>
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (1996). *Teaching pronunciation: A reference for teachers of English speakers of other languages*. New York, NY: Cambridge University Press.
- Centeno, J. & Anderson, T. (2007). Contrastive analysis between Spanish and English. In J. Centeno, T. Anderson & L. Obler (eds), *Communication disorders in Spanish speakers: Theoretical research and clinical aspects*. Clevedon, Buffalo; Multilingual matters LTD. Pp.11-33.
- Coe, N. (2001). Speakers of Spanish and Catalan. In M. Swan & B. Smith (Authors), *Learner English: A Teacher's Guide to Interference and Other Problems. Cambridge Handbooks for Language Teachers* (pp. 90-112). Cambridge: Cambridge University Press. Doi:10.1017/CBO9780511667121.008
- Corder, P. (1967). The significance of learner's errors. *International Review of Applied Linguistics*, 5, 161-170
- Corder, S.P. (1981). *Error analysis and Interlanguage*. Oxford: Oxford University Press.
- Denizer, E (2017). Does Mother Tongue Interfere in Second Language Learning? *Journal of Foreign Language Education and Technology*, 2(1) pp.39-54. Retrieved from: <http://dergipark.gov.tr>
- Dekeyser, R. (2012). Age effects in second language learning. In S. Gass & A. Mackey (eds), *The Routledge Handbook of Second Language Acquisition* (pp. 645-670). London & New York: Routledge Taylor & Francis Group.
- Dulay, H. & Burt, M. (1974). Errors and strategies in child second language acquisition. *TESOL Quarterly*, 8(2), 129-136.
- Ellis, R (1997). *Second language acquisition: Oxford introductions to language study*. Series Ed H.G. Widdowson. Hong Kong: Oxford University Press.

- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press
- Essays, UK. (November 2013). *The Importance of Pronunciation for English Students English Language Essay*. Retrieved from: <https://www.ukessays.com>
- Fangzhi, Ch. (1998). The Teaching of Pronunciation to Chinese Students of English. China. *E-Usia Forum, Vol 36*, 1. Retrieved from: <http://dosfan.lib.uic.edu>
- Flipped Learning Network (FLN) (2014) The Four Pillars of F-L-I-P™ Retrieved from: <http://flippedlearning.org>
- Frankfurt International School (FIS) (n.d.). *A guide to learning English: The differences between English and Spanish*. [online] Retrieved from: <http://esl.fis.edu> [Accessed 23 Apr. 2017].
- Gallardo del Puerto, F. & Gómez, E. (2008). La enseñanza de las vocales inglesas a los hablantes de español. Sección 2. Análisis contrastivo de las vocales del inglés y del castellano. *Revista Pulso CUCC*, N° 40 [online]. Retrieved from: <http://revistapulso.cardenalcisneros.es> [Accessed April 29th, 2017].
- Gilakjani, A. (2011). A study on the situation of pronunciation in ESL/EFL classrooms. *Journal of studies in education, vol 1*, N° 1: E4, 1-15.
- Gonzales, C. (2012). Native speakers of Spanish learning English: The phonetic problems that may arise and some possible solutions.p.1-14 [online]. Retrieved from: <http://coreygonzales.weebly.com> [Accessed April 10th, 2017].
- Goswami, J. & Chen, H. (2010). *The Impact of Instruction in Phonetic and Phonemic Distinctions in Sounds on the Pronunciation of Spanish-speaking ESL Learners*. Mextesol Journal, [online] Vol. 34 Ed. 1, p.29-39. Retrieved from: <http://mextesol.net>
- Griffiths, B. (2004). *Integrating pronunciation into classroom activities*. British Council & BBC. Retrieved from: <http://www.teachingenglish.org.uk>
- Hancock, M. (2000). *Pronunciation games*. Cambridge: Cambridge University Press
- Harley, B. & Wang, W. (2014) The Critical Period Hypothesis: Where Are We Now?. In De Groot, A. & Kroll, J. (eds.), *Tutorials Bilingualism Psycholinguistic Perspectives*. (p. 19-38). New York, London: Psychology Press.

- Hernández, G. González, J. & Algara, A. (2011). Realización de las consonantes fricativas alveolares en la coda silábica en el inglés (nivel básico) de Hispanohablantes Venezolanos. *CONHISREMI Revista Universitaria Arbitrada de Investigación y Diálogo académico*, vol 7(1). Retrieved from: <https://conhisremi.iuttol.edu.ve>
- Hewings, M. (2004). Pronunciation practice activities. Cambridge Handbooks for Language Teachers. Cambridge: Cambridge University Press.
- Hinkel, E. (2018). Error analysis. In J. I. Lontos, T. International Association and M. DelliCarpini (eds.), *The TESOL Encyclopedia of English Language Teaching* (1st ed., pp. 1-5). John Wiley & Sons, Inc. Published. doi:10.1002/9781118784235.eelt0058
- Huang, L. (2010). Reading Aloud in the Foreign Language Teaching. *Asian Social Science*. Vol 6(4). Retrieved from: <http://www.ccsenet.org/journal>
- Kalhousová, E. (2014). *Análisis de las interferencias fonético-fonológicas del español en el inglés de los hispanohablantes nativos*. (Tesis de licenciatura, Universidad Javeriana, Colombia). Retrieved from: <https://is.muni.cz/th/>
- Khansir, A. (2012). Error Analysis and Second Language Acquisition. *Theory and Practice in Language Studies*. Vol 2(5). 1028-1032. Retrieved from: <http://www.academypublication.com>
- Kelly, G. (2000). *How to teach pronunciation*. Harlow, UK: Longman
- Kenworthy, J. (1987). *Teaching English Pronunciation*. Longman Handbooks for Language Teachers. England & New York: Longman.
- Kirkman, R. (n.d.). *The Critical Period Hypothesis*. Academia. Retrieved from: <https://www.academia.edu>
- Kuhl, P. (2010) Brain Mechanisms in Early Language Acquisition. *Neuron*, 67(5), 713–727. Doi:10.1016/j.neuron.2010.08.038.
- Lado, R. (1957). *Linguistics Across Cultures*. CSU, Chico: University of Michigan Press.
- Lennon, P. (2008). Contrastive analysis, error analysis, interlanguage. In S. Gramley and V. Gramley (eds.), *Bielefeld Introduction to Applied Linguistics*. Bielefeld: Aisthesis, pp. 51-60.
- Major, Ch. (2014). *The effect of age on second language acquisition in older adults* (Master thesis, Brigham Young University). Retrieved from: <https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=4972&context=etd>
- Mayordomo, R. (2013). *Interferencias orales. Interferencias lingüísticas entre el español y el inglés desde una perspectiva práctica*. Retrieved from: <https://uvadoc.uva.es>

- Oxford Royale Academy. (2014). *4 Difficulties English Poses for EFL Learners, and How to Overcome Them*. Par.2-13- Retrieved from: <https://www.oxford-royale.co.uk>
- Pérez, J. (2011). Estado actual del tema. El fonema /r/. Adquisición del fonema r por aprendices estadounidenses desde la fonética auditiva y articulatoria. Universidad de Granada. *Marco ELE, núm. 12*. Retrieved from: <http://marcoele.com>
- Pinter, A. (2012). *Children learning second languages*. New York: Palgrave Macmillan
- Pizarro, G. & Cordero, D. (2015). Problemas fonológicos en aprendientes costarricenses de Inglés. *Revista Letras, Vol. 2* Número 58. Retrieved from: <http://www.revistas.una.ac.cr/index.php/letras/article/view/9062/10567>
- Ramírez, M. (2018) Flipping a pronunciation lesson for a teacher training course. In J. Mehring and A. Leis (eds), *Innovations in flipping the language classroom: Theories and Practices* (pp. 45-57). Singapore: Springer Nature Singapore Pte Ltd.
- Richards, J. & Schmidt, R. (2002). *Dictionary of applied linguistics*. London: Longman.
- Rengifo, A. (2009). Improving pronunciation through the use of karaoke in an adult English class. *Profile 11*, 91-105
- Roach, P (2013). English phonetics and phonology a practical course. *Nasals and other consonants*. Chart of English phonemes (Image).p.52.
- Sompong, M. (2014). Error Analysis. *Thammasat Review* (16) 2. Retrieved from: <https://www.tci-thaijo.org>
- Steward, A. (1971). *Contrastive Analysis of Spanish and English Sounds Which Create Pronunciation Difficulties*. Retrieved from ERIC database. (ED058802)
- Torres, J. (2007). Necesidades específicas del hispanohablante en el aprendizaje de la pronunciación del inglés. Sección 1. Las actividades en los manuales de pronunciación de inglés como lengua extranjera. *Biblioteca Phonica, 6*. 49-63. Retrieved from: <http://www.publicacions.ub.edu>
- Tost, G. (2013). Bettering pronunciation through reading aloud and peer appraisal. *Bellaterra Journal of Teaching & Learning Language and Literature* vol 6(1). 35-55. Retrieved from: <http://revistes.uab.cat>
- Touchie, H. (1986). Second language learning errors their types, causes, and treatment. *JALT Journal* 8 (1). 77-79.

- Valenzuela, J. (n.d). *Nivel fonológico. Lingüística contrastiva inglés-español: una visión general*. Universidad de Murcia. 2-6. Retrieved from: <https://www.um.es/lincoing>
- Valero, C. (2010). *Algunos aspectos relativos al nivel fonológico. Dos lenguas y dos formas de ver el mundo*. España: Gobierno de España. Ministerio de cultura (1). Retrieved from: <http://www.cuadernos cervantes.com>
- Vera, K. (2014). *Fenómenos de reducción vocálica por hablantes Colombianos de inglés como L2: un estudio acústico*. Retrieved from: <http://www.scielo.org.co>
- Wells, J. (2000). Overcoming phonetic interference. *English phonetics, Journal of the English phonetic society of Japan*. Retrieved from: <http://www.phon.ucl.ac.uk>

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