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Teaching American English Pronunciation in a Spanish Speaking Context: A Guide for EFL Teachers in Chile

Martin P. Quarto
martin.quarto@gmail.com

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University of San Francisco

Teaching American English Pronunciation in a Spanish Speaking Context: A Guide for EFL Teachers in Chile

A Field Project Presented to
The Faculty of the School of Education
International and Multicultural Education Department

In Partial Fulfillment of the Requirements for the Degree
Master of Arts in Teaching English To Speakers of Other Languages

by
Martin Quarto
June 2022

Teaching American English Pronunciation in a Spanish Speaking Context:
A Guide for EFL Teachers in Chile

In Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

in

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

by
Martin Quarto
June 2022

UNIVERSITY OF SAN FRANCISCO

Under the guidance and approval of the committee, and approval by all the members, this field project has been accepted in partial fulfillment of the requirements for the degree.

Approved:

Luz Navarrette García — May 20, 2022

Luz Navarrette Garcia, EdD — Date

Instructor/Chairperson

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ABSTRACT

This field project addresses the lack of education surrounding pronunciation teaching, and it specifically responds to the opportunities available within English as a Foreign Language settings. This project is especially relevant to English language teachers who would like to study pronunciation teaching and its history. The objective of this research is to inform educators of the validity of teaching pronunciation and to teach educators effective strategies that can be used. Theories of Contrastive Analysis and Error Analysis form the foundation of this project, as well as theories of Interlanguage and Markedness. The literature review includes extensive research into the subject matter of pronunciation teaching and Contrastive Analysis. The project is a video-lecture series to support the pronunciation instruction for native Spanish speakers. The Contrastive Analysis is between English and Spanish, and the video-lecture series was made for a specifically Chilean audience.

CHAPTER I
INTRODUCTION

As I better acquaint myself with the culture surrounding English language education, both domestically and abroad, I notice that there is a lack of pronunciation classes, as well as a lack of confidence in how to teach it. Though English language teachers might be de-stressing the importance of pronunciation practice, it appears students remain motivated to take such classes. For example, in the Bay Area, it is rare for community colleges to offer pronunciation specific courses; I acted as a Teacher's Assistant for the College of Alameda, where it was revealed to me that the pronunciation course I assisted in was one of only a select few.

Since the inception of the TESOL master's program, offered through the University of San Francisco, a lingering question has stayed with me. Namely, how effective would I be at leading a class to help native Spanish speakers with their English pronunciation? How would I set my focus? As the date approaches where I graduate, my sights are set on relocating to Chile, where I have family, and where I can professionally grow teaching English. This would be within an English as a Foriegn Language (EFL) context. Since Chile is linguistically quite monolingual, most of my students would be native Spanish speakers. For the purposes of this field project, I focused on the most important pronunciation features that should be covered in a pronunciation class—specifically for Spanish speakers. I am hopeful that the insights gleaned from this project can later be applied to assist language learners of any linguistic background.

Statement of the Problem

According to Celce Murcia et al. (2010), the international language teaching profession has changed positions several times with respect to teaching pronunciation. As the pendulum swings, teaching pronunciation either has been placed in the background or the foreground of language teaching. There was, for example, the Audiolingual Method, where teachers stressed perfect pronunciation from the beginning. Then, subsequently, there was the Direct Method, which deemphasized pronunciation—delayed oral production, and assumed that pronunciation errors disappeared naturally (Celce Murcia et al., 2010). Every new trend exhibits interesting differences in the way pronunciation is dealt with, but nonetheless feeds the inconsistency regarding the prioritization of pronunciation teaching.

Furthermore, it is important that EFL classrooms take the opportunity to utilize the fact that most of their students have the same native language (L1). Because educators often have a working knowledge of the students L1, curriculum should be developed that best leverages an understanding of students' L1 and how it may contribute or interfere with target language (L2) phonological acquisition; this requires explicit knowledge of segmental and suprasegmental features. Several researchers have concluded that there are benefits to nonnative teachers, surrounding their intimate familiarity with acquiring English through their L1 (Walker 2001; Snow, Kamhi-Stein, & Brinton 2006).

Given the scope of teaching pronunciation, many educators completing English language teaching programs are ill-equipped to work with students in pronunciation (Hucke 2021, MacDonald 2002). According to Celce-Murcia et al (2010), specifically within the EFL setting, the majority of EFL teachers, who are often highly competent L2 users, rather than native speakers, have been traditionally reluctant to focus on pronunciation. Because of this,

specifically in EFL settings, students are not receiving adequate pronunciation instruction or practice. Because of this, educators should be made aware of tools and techniques that have proven effective in pronunciation teaching.

Purpose of the Project

According to Celce-Murcia et al. (2010), pronunciation instruction is now moving away from the suprasegmental/segmental debate, and towards a more balanced view. Today's pronunciation curriculum seeks to identify the most important aspects of both the suprasegmentals and segmentals, integrating them both into pronunciation courses. This view recognizes that both the inability to employ suprasegmental and segmental features both can have a negative impact on the oral communication—and listening comprehension—of nonnative speakers of English (Celce-Murcia et al., 2010*)*.

What educators need to learn are quality methodological approaches. Educators should be able to understand the segmental and suprasegmental components of the English pronunciation they are aiming to teach. Educators should then be able to express these features explicitly, as well as incorporate activities that implicitly have students practicing various phonological features. By viewing my videos, educators should be able to replicate them in their own classrooms, utilizing a myriad of pronunciation teaching techniques.

Also, educators should be motivated to inform themselves as to what phonological aspects their students will most struggle with, utilizing a weak Contrastive Analysis, paired with other Second Language Acquisition theories related to pronunciation. Of special interest are the innovations surrounding technology and data analysis; there appears to be a burgeoning

opportunity to track and visualize learner's L2 phonological development; further research is needed to clarify for effectiveness.

In sum, the purpose of this project is to address the lack of teacher training in pronunciation teaching, as well as to provide best practices towards how to develop pronunciation curriculum effectively. Upon reading this, teachers will become more familiar with the discussion of realistic goals surrounding pronunciation teaching and pronunciation curriculum development. Lastly, this project will prove most helpful for those educators aiming to work within an EFL setting, specifically serving a population of native Spanish speakers learning American English pronunciation.

Theoretical Framework

According to Celce-Murcia et al. (2010), English pronunciation teachers should draw from the growing body of research in L2 phonology. This field concerns itself with the following questions, (1) to what degree is the process of acquiring an L2 like acquiring an L1? (2) to what degree do pronunciation patterns acquired in one's L1 govern or determine the process of L2 phonological acquisition? and (3) are there underlying language universals in the acquisition of phonology? For the purposes of this field project, the focus is less on language universals, less on the phonological acquisition of L1, and more on the degree that L1 governs or determines the process of L2 acquisition.

According to Celce-Murcia et al. (2010), there are several theories about the role of the first language in second language acquisition. Four worth highlighting include: (1) the Contrastive Analysis Hypothesis, (2) the Error Analysis, (3) the Interlanguage Hypothesis, and

(4) the Marked Hypothesis. Each of these theories builds, challenges, and overlaps with the next; these serve to highlight a relevant discourse within pronunciation teaching and research.

The Contrastive Analysis is an important starting place, as it helps formulate the later theories. Within its original conception, the Contrastive Analysis theorizes that a speaker's native language is the primary obstacle to learning a foreign language, as such, it was recommended that educators study a language learner's native language, and thus contrast this to the target language. The Error Analysis, following this, chooses to focus less on predictive power, but instead to quantify the errors language learners produce, and then trace them retrospectively to contrastive differences between languages. Following this, the Interlanguage Hypothesis chooses to study the limits of language learning, seeing contrastive differences between languages as sites for such limitations, among other things. Lastly, the Marked Hypothesis builds upon all previously mentioned hypotheses and posits a way to predict learner difficulties, which is especially effective within phonetics and pronunciation difficulties (Celce-Murcia et al. 2010).

Furthermore, this project builds on the work of foundational experts in the development side of the pronunciation teaching curriculum. For example, Gilbert (2001), with his priorities for beginning students, is reviewed; this is an early example of pronunciation curriculum development protocols. Also reviewed is Jenkin (2000), with Lingua Franca Core, which is perhaps the most famous and influential pronunciation teaching methodology. Lingua Franca Core is a curriculum development recommendation that serves EFL students specifically, arguing that international students shouldn't aim for native English pronunciation, but instead for pronunciation best serving communication between non-native English speakers. These features often don't overlap with native English speaker needs; often this means ignoring suprasegmental features, such as vowel reduction, palletization, and sentence stress. Also reviewed, for example,

is Dauer (2005), who challenges Jenkin, arguing for the importance of suprasegmental pronunciation features, even in EFL settings; for example, according to Dauer (2005) many suprasegmental pronunciation features, such as linking, make English easier to speak.

Significance of the Project

According to Celce-Murcia et al. (2010), language teaching, as it stands today, is focused mostly on communication. The Communication Approach posits that the primary purpose of language is to communicate; most pronunciation features fall to the wayside, as they aren't always essential to this goal. According to Celce-Murcia (2010), most proponents of Communicative Language Teaching have not dealt adequately with the role of pronunciation in language teaching.

While pronunciation courses have been deemphasized, there is growing interest in pronunciation practices. If intelligibility falls below a certain threshold level, speakers will have communication problems, no matter how good their grammar or vocabulary is (Hinofotis & Bailey 1980). Because of this, Celce-Murcia et al. (2010) argues that we should bring a renewed fervor towards proper pronunciation teaching strategies and smart curriculum.

Furthermore, while many students desire perfect pronunciation (they wish to sound like native English speakers), it is the goal of many educators, and current theorists, to instead aim pronunciation teaching towards intelligibility. By taking more pragmatic approaches, such as this, within curriculum design and pronunciation teaching—educators will better help students reach more attainable goals.

Learning to apply a Contrastive Analysis offers to students of a similar L1 the unique opportunity of a tailored pronunciation curriculum. This project allows educators to lead

pronunciation courses, better predicting student difficulties and better estimating how much impact certain pronunciation points might have in contrast to time spent. Then, wherever pronunciation difficulties cannot be traced back to Contrastive Analysis, learning to apply insights gained from other theories, such as Markedness Theory—can help predict what pronunciation features learners will have difficulties with, dependent and independent of their L1.

Definition of Terms

Contrastive Analysis: According to Celce Murcia et al. this is the most long-standing theory of phonological acquisition (2010). This theory holds that our native language produces interference with how we learn other languages.

English as a Foriegn Language (EFL): English as a Foriegn Language traditionally refers to teaching English in a context that does not regularly use English to communicate with one another. Typically, compared to an English Language Learning (ELL) classroom in the United States, students have less access to English outside of the classroom, and the classroom is generally composed of more students of the same native language (Celce-Murcia et al., 2010).

Intelligibility: Intelligibility refers to the degree to which a listener can recognize words, phrases, and utterances (Smith and Nelson, 1985, Derwing and Munro, 1997). It is possible, for example, for even heavily accented speech to be intelligible (Lane, 2010). According to Lane (2010) without intelligibility, communication is impossible.

Interlanguage: This term was created by Selinker at the onset of the 1970s. It is a term that refers to a series of linguistic codes that reflect unique systems (Selinker, 1972). It is viewed as a dynamic continuum along which a second-language learner can move towards an increasingly target-like system (Corder, 1975).

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The claim of this literature review is that pronunciation curriculum should be developed that is responsive to global and local needs of English language learning. There are three sets of scholarship that support this claim. The first area of scholarship surrounds language learning theories relevant to pronunciation, namely the Contrastive Analysis and Error Analysis, among others; importantly, this is applied to native Spanish speakers learning English. The second area of scholarship reviewed in this chapter reviews various curriculum design thinkers (related to pronunciation teaching in EFL settings). The third area of scholarship surrounds various technologies that are currently being used for pronunciation teaching, as well as possible future directions. This scholarship is important because it shows the unique place-hood of pronunciation teaching—including historical perspectives, as well as technological innovations. The scholarship in this chapter is also important because it provides a template for creating a pronunciation curriculum for a specific audience of L1 speakers within an EFL setting.

Contrastive Analysis and Beyond

The practice of analyzing a students' native language became widespread through Lado's 1957 publication. Lado proposed that all aspects of language acquisition could be traced back to a students' L1. His theory held that a students' first language acted as a filter through which they attained their L2 (Lado, 1957). This theory, when it came about, caused a revolution in language learning education. First language interference was seen, half-blindly, as a valid explanation for

all the difficulties faced by language learners in the realms of syntax, morphology, and phonology (Celce-Murcia et al., 2010).

The theory, since then, has received criticism (Wardhaugh, 1970). This is primarily because this theory fails to predict what errors individual learners will make, and what degree of difficulty different learners will face for a given linguistic feature (such as reducing unstressed vowels).

For example, an influential researcher by the name of Wardhaugh (1970), rejected Contrastive Analysis on the basis that it was unable to predict all learning problems. He instead argued for the validity of a watered-down version of the Contrastive Analysis. According to Wardhaugh, the Contrastive Analysis could help predict potential difficulty points, meanwhile other theories, such as Error Analysis and Markedness Theory could help complement it. In the words of Wardhaugh, "reference is made to the two systems only in order to explain actually observed interference phenomena" (1970, p. 127). To Wardhaugh (1970), though predictions can be made, the Contrastive Analysis is most useful as a diagnostic tool, for observing student errors.

Contrastive Analysis can be seen as a starting point for modern theorizing and research regarding language learning—specifically for pronunciation. Though less prevalent in the academic realms of syntax and morphology, Contrastive Analysis still plays a major role in pronunciation research (Lane, 2010). Many researchers hold that negative transfer accounts for many distinctive fossilizable segmental and suprasegmental features (Broselow, 1984; Sato, 1987; Tarone, 1987).

Furthermore, understanding a students' native language can help predict where difficulties may arise, but can by no means help predict how difficult it will be for an individual

student to overcome a specific linguistic difficulty. Early critics of the Contrastive Analysis highlight this main difficulty. Since difficulties seem to spring up differentially across individuals, researchers like Banathy and Madarasz (1969) argue for the need to complement the Contrastive Analysis with a proper Error Analysis, which analyses the errors learners are quantifiably producing. According to these researchers, the Contrastive Analysis can provide conjecture, while an Error Analysis can calculate the intensity and size of a given difficulty.

There appears to be a unique opportunity for combining modern disciplines, such as data science, to further track students' errors, hedging towards more interactive, individualized, and responsive learning but more research would need to be done to discern such working models. Research on this matter has been conducted by Garcia (2021) who aims to help educators statistically and visually model the complexities of L2 development, using the programming language R—a popular programming language for statistical analysis.

According to Celce Murcia, et al. (2010), it is crucial to consider our students' native languages when deciding on pronunciation priorities. According to Corder (1992), being able to identify learning difficulties can result in targeted practice and focused teaching. Specifically, there have been various studies that have utilized Error Analysis to assist Spanish speakers in improving their L2 pronunciation (Castillo, 2016; Goswami & Chen, 2010; Vera, 2014). This said, our students' native language shouldn't be the only place to look for roots of difficulties; this is because there are limitations in viewing our students' native languages as the only predictor of language learning difficulty.

Interlanguage Considerations

An important complement to Contrastive Analysis is the theory of Interlanguage. This is a theory that was proposed in the early 1970s by Selinker (1972). According to Selinker, an Interlanguage is a unique linguistic code every language learner operates within. For example, any utterance made by a student comes from this Interlanguage; it is separate from the native and target language, yet dependent on both. According to Selinker, this Interlanguage follows a system based on native language structures, target language input, language universal properties, and general communication strategies (Selinker, 1972).

Selinker also helped coin the term fossilization. This is defined as a plateau in language learning where it becomes exceedingly difficult for learners to progress towards the target language. In this way, language learners fall somewhere between the native language and the target language, and growth towards the target language slows down exponentially (Selinker, 1972).

Han (2004) describes the inability of most learners to attain complete L2 attainment. He describes a differential success across learners, and a differential success within learners. Of interest Han sees Interlanguage as a kind of realistic outcome in working with students. According to this principle, we are never second language teachers, but Interlanguage teachers (Han, 2004). Importantly, within these Interlanguage systems, there are similarities within linguistic populations. For example, as noted by Garcia Perez (2011), Spanish speakers have higher difficulties mastering English vowels than they do English consonants; this is likely because English has 14 vowels while Spanish has 5.

Of interest, Han recommends the technique of modularization; this means breaking fossilized linguistic features within learners down into modular parts. In his research, Han has

shown that certain linguistic features can become de-fossilized without affecting positive stabilizations, and/or other fossilizations; Han has also shown that certain features may be fossilized while other features remain un-fossilized (Han, 2004).

Lastly, Interlanguage Theory suffers from not being able to predict difficulties, like Contrastive Analysis; it also suffers from not being able to predict where the Interlanguage will end, and where fossilization will occur. This said, the influence of the Interlanguage theory can be felt in subsequent language acquisition theories.

Markedness Considerations

One important theory that complements Contrastive Analysis, specifically for its ability to predict learner difficulties, is Eckman's Markedness Differential Hypothesis (1977). Eckman's Markedness Differential made a point to try and predict the areas of phonology that would be most difficult for learners within a specific language group, which is relevant within the EFL context. Furthermore, Eckman's Markedness Differential attempted to predict what exact substitutions would be made when attempting to pronounce specific sounds.

Also, it was important to Eckman (1977) to understand the directionality of language learning difficulty. For example, why might it be difficult for native German speaking learners to learn a word-finally voiced obstruent, but a native English speaker learning German might learn to not use a word-final voiced obstruent with relative ease?

Eckman (1977) defines Markedness by proposing the following formula:

> Markedness: A phenomenon A in some language is more marked than B if the presence of A in a language implies the presence of B; but the presence of B does not imply the presence of A.

For example, according to Dinnsen and Eckman (1978), if a language maintains a voice contrast in a word-final position, it necessarily maintains such a contrast in word-medial and word-initial position. However, it is possible for a language to have a voice contrast word-medially and/or initially without exhibiting such a contrast word-finally. In this case, the voice contrast in the word-final position would be seen as marked.

González and Roura (2016) created a textbook of English pronunciations for speakers of Spanish. It is quite comprehensive in scope, covering both segmental as well as suprasegmental features. Unfortunately, it doesn't cover which of these features would be most marked, thus predicting directionality of difficulty. According to Eckman (1991), though we can compare syllabic structures, for example, we aren't able to make predictive use of this information without some understanding of Markedness Theory.

Furthermore, Eckman (1977) has also discussed how Error Analysis has led many linguists to conclude that a large portion of errors can be attributed to intralingual interference. This means that these difficulties are the same difficulties faced by children acquiring a target language as a first language. In the words of Popal, if a word is hard to pronounce for a native speaker of the target language, it will generally be hard for language learners of that target language (personal correspondence, 2021). This would then have nothing to do with language interference, but instead with some marked features within the language that are particularly precarious.

Important to Markedness Theory is an understanding of language universals, working within the assumption that all languages share common constraints. The most influential studies stem back to Jakobson (1941) who studied phonological acquisition and created an implicational hierarchy therein. Much of Eckman's (1991) work investigates whether second language

acquisition follows the same process as first language acquisition; this work builds off Jakobson's (1941) work.

According to Celce-Murcia et al (2010), this line of linguistic investigation should help augment insights gained from Contrastive Analysis and predict which problems would be most difficult for a group of linguistically homogeneous learners. It is important to learn the marked aspects of a native language, in comparison to English; once studied, these can be localized to a specific region and/or a specific dialect.

Considerations Moving from Spanish to English

There are common phonological differences and difficulties for students moving from Spanish to English. These are phonological difficulties that many may already be aware of. This Contrastive Analysis framework is especially helpful for curriculum development and instruction.

According to my colleague Przybyszewska, whose own work has greatly influenced this field project, much more attention has been given to contrasting Spanish to English, compared to other languages, such as Bulgarian (personal communication, 2021). Since my focus is on native Spanish speakers, I was able to locate several researchers doing work on Contrastive Analysis between Spanish and English—specifically within the realm of phonology and pronunciation. Such theorists and researchers include Coe (2001), Gonzales (2012), and Lennon (2008).

According to Torres (2007), for example, the most salient difference between the Spanish and English phonological system is the number of vowels, diphthongs, and consonants. Another key difference, according to Richards and Schmidt (2002), includes the difference in which clusters are allowed at the beginning and end of syllables.

Vowels, specifically, comprise an enormous difficulty for native Spanish speakers. According to Odisho (1992), English has a system that tolerates a wide variety of vowels, and that this system can range from very tense to very lax. Adding to this, vowels can also range from very long to very short. Moreover, this laxness allows for English vowels to have their unique tendency to sway towards the schwa (Odisho, 1992). On the other hand, Spanish vowels are relatively more tense, with no tolerance for laxness; all vowels are pronounced clearly and distinctly, even if unaccented. For this reason, all vowels in all syllables are pronounced almost equally in Spanish (Odisho, 1992). Here we see vowel properties informing suprasegmental features, such as rhythm. According to Dale and Poms (1985), instruction for Spanish speakers should be informed by this fact.

Furthermore, English is said to have a stress-timed rhythm whereas Spanish is said to have a syllable timed rhythm (Celce-Murcia et al., 2010). To better evidence this fact, MacPherson (1975) evokes the following sentence.

Juan no sabe lo que dijo Pepe
Juan no sa be lo que **di** jo **Pe** pe

There are ten syllables, and even though five of the ten are stressed, the stressed syllables are neither shorter nor longer than the five unstressed syllables (MacPherson, 1975). This can then be compared to the following two English lines.

Nine Big Black Cats

Ninety e**norm**ous ver**mill**ion **cur**tains

According to MacPherson (1975), the second line is not significantly longer than the first line, if uttered. This is because the main time-consuming elements are the stressed syllables, and the rest is rushed through. This defies the fact that the second sentence is six syllables longer; the extra syllables are crushed up closer together, and the time devoted to stressing the stressed syllables are correspondingly shortened (MacPherson, 1975).

There are clearly many more phonological differences between English and Spanish. A long-standing critique of the Contrastive Analysis theory is that it cherry-picks from a seemingly endless array of possible linguistic differences (Celce-Murcia, 2010). The few I mention now only begin to help narrow the focus. Such narrowing of focus is important to curriculum development for pronunciation in an EFL setting.

It is argued that, on a metalinguistic level, students should be aware of the linguistic differences between their L1 and L2; in recognizing a relationship between the L1 and the L2 it encourages educators to validate learners' L1, increasing learners' self-confidence (Piorno, 2018). Researcher Piorno (2018) takes the Contrastive Analysis and compiles a list of what she believes to be the important features to teach native Spanish speakers. This list is comprised of several phonetic features, including the following:

1. English vowel length differentiation: sheep/ship,
2. Emphasis on final voiced English consonants: bag vs back,
3. Focused practice on consonant clusters beginning with /s/: star vs estar
4. Syllabic length awareness: stressed and reduced.

Lane (2010) compiles another list of important features to teach native Spanish speakers. These include four components. The first is that of word stress, like what has been previously mentioned. The second is that of rhythm and intonation. The third is that of difficult consonants, including clusters. Fourthly, is that of vowels and their spelling correspondences. Some details mentioned include the much more regular stress placement in Spanish, where any irregular stress is marked orthographically. Furthermore, according to Lane (2010), Spanish follows very similar intonational patterns to English, with the exception that the range of intonation is much narrower; this is a transfer that can make Spanish students sound disinterested. The four components outlined, word stress, rhythm and intonation, consonants / consonant clusters, and vowels, comprise a useful delineation between pronunciation features.

Designing the Pronunciation Curriculum

As stated earlier, the goal of pronunciation practice should be that of intelligibility. According to Celce Murcia et al (2010), various terms have been used to describe intelligibility. According to Smith and Nelson (1985), intelligibility can be defined as an interaction that occurs between a listener and a speaker. Furthermore, according to Brown (1991) it is important, as educators, that we ask, "intelligible to whom?" This is especially important within an EFL setting as often English-speaking correspondences occur between nonnative English speakers and other nonnative English speakers.

It is important to reaffirm intelligibility as a worthy goal. In the words of Morley (1999), educators should aim towards realistic goals of instruction. Aiming towards accent reduction is problematic for several reasons; for example, according to Celce-Murcia et al (2010) accent must also be connected to personal identity and can represent an identification and membership in a

particular group. Eradicating accents can be seen as eradicating identities. According to Kjellin (1999) the term *accent addition* is much more appropriate for the work that takes place in pronunciation classes; according to Kjellin, we should be aiming our students towards thinking of pronunciation as acquiring a new skill or talent. Every phonological feature—such as vowel reduction—serves as a kind of communicative tool.

According to Celce Murcia et al (2010), the goal of intelligibility does not refer to a complete lack of accent, it refers instead to an accent that does not distract the listener. The listener is something that has been called into question, by several curriculum designing theorists. For example, Jenkin (2000, 2006) researched interactions between nonnative speakers and created a list of pronunciation priorities titled Lingua Franca Core. On the other hand, Zielinski (2008) researched interactions between nonnative English speakers and native English speakers. Both studies shed light on important considerations regarding pronunciation teaching within EFL settings; mainly, that native English speakers and nonnative English speakers listen for different phonetic speech cues and signals.

Firstly, Jenkin (2000, 2006) discovered that it was most important for students to master all the consonants, excluding /th/ and or velarized or dark /l/. She also highlighted the importance of vowel lengthening; consonant cluster features; tense-lax vowel distinctions; and prominence. What Jenkin highlights in her research is that not every phonetic feature is useful for interactions between nonnative English speakers; specifically, according to her research, suprasegmental features aid native English speakers, but seemingly burden nonnative English speakers. For example, for nonnative English speakers, non-reduced forms of function words actually aid in intelligibility, serving to highlight important syntactic cues (Jenkin, 2000). Jenkin argues to ignore such features, depending on a speaker's needs.

Secondly, Zielinski (2008) discovered that the two things that contribute most to intelligibility include accurate word stress and accurate production of sounds in stressed syllables. Zielinski (2008) stresses that native listeners rely on both the word-stress pattern and the sounds in speech signal, and that the interaction between the two is important. As a part of this, Zielinski (2008) argues for having students practice differentiating between the strong and weak syllables. This goes against Jenkin's (2000) initial conception of the Lingua Franca Core. Lastly, Zielinski (2008) argues that educators should not isolate these two features (word stress and/or accurate pronunciation of sounds in stressed syllables); instead, these should be taught concurrently. I found Zielenski's view most helpful, but reconciled these differing theories by giving attention to specific features, such as strong and weak syllables, but by also giving control away to students to decide on their importance within their own learning needs. Jenkin was valuable for my own understanding of student centered pronunciation teaching. I learned to ask myself, how can I decide what is of highest importance for English language learners, separate from what is important within the arena of native English speakers only?

Many critiques of Jenkin's Lingua Franca Core stem from a lack of emphasis surrounding the suprasegmental features (Celce-Murcia et al, 2010). For example, Dauer (2005) argues that features Jenkin deemphasizes contradict key findings found by other researchers (Derwing & Munro, 1997; Derwing & Rossiter, 2003). According to these researchers, focusing on phonemic features results in less improvement of intelligibility in comparison to focusing on prosody. Furthermore, in focusing on prosodic features in learning, students are better able to utilize prosodic training transfers to extemporaneously produced speech (Derwing & Rossiter, 2003). Dauer and Browne (1992) created an excellent resource for teaching linking features specifically related to connected speech; of interest, they argue that focusing on connected speech leads to an

easier use of difficult consonants, as difficult consonants may become syllable initial or syllable medial (1992, p.8).

In sum, the field of phonology is vast. To not try teaching everything, educators need to set out clear goals, and create curriculum that targets all the most important phonological features. A great first foray into designing a curriculum for pronunciation can be found with Gilbert's (2001) six pronunciation priorities for beginning students. These include (a) core vowels (b) core consonants (c) syllables (d) linking words in a thought group; (e) word stress--using long and short syllables, and (f) intonation / emphasis. These six facets cover a wide range of phonological features, including: consonants, vowels, connected speech, stress, prominence, and rhythm. Lastly, an even more comprehensive game-plan for curriculum development can be found within Celce Murcia et al (2010) and Lane's (2010) textbooks on teaching pronunciation.

Bridging Technology and Pronunciation Practice

Using a Database paired with ASR to provide appropriate feedback

According to Celce-Murcia et al (2010), effective pronunciation applications present multiple pronunciation models, motivates the learner to practice, provides accurate articulatory information, and focuses on feedback most critical to intelligibility. According to the authors, a major problem in effective pronunciation software lies in its inability to provide accurate assessment and feedback. Often feedback is incorrect or too general. The technologies we have, specifically automatic speech recognition (ASR), were originally designed for native English speakers. What is needed now are machines that can recognize currently unintelligible

pronunciation speech patterns of non-native speakers and can then provide appropriate feedback (Celce-Murcia et al, 2010).

In a research article, researcher Kolesnikova (2017) explores the similarities between the consonant systems of American English and Mexican Spanish, conducting in effect a Contrastive Analysis. Kolesnikova (2017) then uses this information to theorize a computer assisted pronunciation training that incorporates a database of potential errors that specific native language speakers are more likely to make. This would instead be creating an ASR alternative that could better listen to nonnative English speakers. The computer program in theory would then recognize intelligible pronunciation errors and translate them into appropriate feedback. This is important because, according to Celce-Murcia et al (2010), ASR lags far behind human listening in comprehending L2 speech; working within a database that contains predictable intelligibility errors, for specific native language speakers, and that retrospectively matches an utterance back into this database, may prove to be a more effective way of providing appropriate corrective-feedback, automatically. All theories that help predict or explain learner errors are then welcomed, as well as more general suggestions, seeing that one cannot always track an error to comparative differences (Eckman 1991).

Using Multimodal Input for Pronunciation Learning

According to Rogerson-Revell (2021), studies consistently confirm the benefit of multimodal input for pronunciation learning. Specifically, there appears to be a great use in visual displays, such as spectrograms and computer animations of lips and oral cavities (Elliot, 1995; Grant & Greenberg 2001).

For example, according to Rogerson-Revell (2021) simultaneously hearing and seeing speech articulations can improve both the perception and production of sounds; this includes visual representations of the lips and the oral cavity. Interestingly enough, according to Badin et al (2010) visual displays of a frontal view of the face are perceived better than a cutaway view of the head. As a tangible example, imagine trying to hear someone on a crowded bus; if your ears fail you, the speaker's lips and body language can guide you. We can take this same concept, and apply it to virtual learning; if students are streaming audio that is choppy, be it because of inadequate connection, or poor technology, visual components will help supplement learning.

Moreover, spectrograms have been shown to help students monitor their pronunciation feedback. According to Olson (2014), with the aid of spectrograms, L2 learners of Spanish were better able to distinguish their own production of stop consonants, in comparison to target forms. On top of spectrograms, Rogerson-Revell (2021) also highlights, at the suprasegmental level, that visual representations can help learners with the perception and production of intonational features.

According to Olson (2014) there has been significant technological advances in speech analysis software. One such software program, Praat, proves to be powerful, free to download, and extremely versatile. The use of speech analysis software to help provide representations of intonation contours can be traced back many years (Olson, 2014). An important study was conducted by Bot (1983) where he showed the potential benefits for visual cues in intonation pronunciation instruction. Students would listen to prerecorded utterances and view a corresponding visual representation. Speakers then attempted to imitate these utterances, and their intonation contours are presented below the target intonation contours. Speakers who received both auditory and visual feedback did better than those compared to a control group.

According to Olson (2014) many early innovations were limited to the analysis of pitch contours. Now, with innovations, speech analysis software can tackle the segmental level, looking at consonants, vowels, and syllable duration; Praat is such an application.

Critics of such applications, such as Praat, consist of the fact that these applications have been designed for researchers, and that it requires a sophisticated level of understanding. Olson (2014) doesn't buy into these criticisms, pushing educators to try utilizing them, and to be happily surprised by the results. As part of Olson's (2014) research, he set students up with Praat, utilizing minimal instruction, and only setting students up with using essential features, ignoring everything else.

Following his research, Olson (2014) surveyed his students, to see how difficult it was for them to use the application; they reported few problems, downloading, recording, and creating a visual picture of their production. Students also shared that using the application was ultimately beneficial to them (Olsen, 2014).

Summary

In summary, understanding the basic components of pronunciation teaching is crucial to educating teachers on how to construct their own curriculum. Of the elements covered, it is important to utilize the students' native language to diagnose language errors, specifically as they are related to intelligibility. Theories of Contrastive Analysis and Error Analysis prove very useful, as well as theories of Interlanguage and Markedness.

As with everything, there is certainly a plethora of research—but implementation is often the most important proof of concept. Of the elements to incorporate in a pronunciation curriculum, it is important to cover segmental and suprasegmental linguistic features. These can

be done utilizing various pronunciation teaching techniques, as can be found in the works of Lane (2010) and Celce-Murcia et al (2010).

In sum, because pronunciation has received less emphasis in recent decades, educators are less likely to implement pronunciation in their teaching. By learning about Contrastive Analysis, Error Analysis, Interlanguage Hypothesis, Markedness Theory, as well as curriculum design for pronunciation classes, as well as the various technologies currently being used for pronunciation teaching, and lastly, by understanding a historical perspective of pronunciation teaching, then an educator can finally feel ready to work with students on pronunciation within an EFL setting.

CHAPTER III

THE PROJECT AND ITS DEVELOPMENT

Description of the Project

The purpose of this field project is to address the lack of teacher training in pronunciation teaching, as well as to provide best practices towards how to develop pronunciation curriculum effectively. To do this, I created a playlist of 19 videos in which I exemplify the pronunciation curriculum development process. The subjects covered in this playlist span from consonants, vowels, syllable structure, stress, and intonation; elements of rhythm are also explored. Within all these videos, within each of these elements, Contrastive Analysis is applied. I take my expertise with Spanish, specifically Chilean Spanish, and guide my instruction in pronunciation teaching. The videos are designed to be viewed in sequence. The run time is over 5 hours. They are freely available to watch on YouTube.

The first video is about the consonant /v/ as in “very”. This is a very difficult consonant for Spanish speakers to produce, simply because it doesn’t exist. There is a Spanish /b/ sound, which is produced similarly to the English /b/, but their equivalent /v/ sound is produced as an allophone of the Spanish /v/. The differences covered in this video include the physical muscles used, and other physical features, such as tongue placement. The /v/ consonant is often strange for students of other languages, because one must stick out one’s tongue. I also have students practice listening for a /v/ and /b/ auditory difference; I also show my mouth when comparing sounds, to allow for students to witness as they listen.

The second video is about the /th/ consonants, /θ/ and /ð/. Once again, these are consonants that don’t exist in the Spanish language. This consonant proves to be quite

challenging for Spanish speakers. To help Spanish speakers, I covered how to physically produce this sound—in two manners, voiced (/θ/) and unvoiced (/ð/). Linguistic differences are discussed, between /th/ and the common substitution made by Spanish speakers: /d/. Minimal pairs are practiced, as well as interactive receptive activities. I also discuss the importance of the /th/ sound, discussing how they comprise many function words, ex: “the”, “them”, “they”, “that”.

The third video is about the consonants /tʃ/ and /ʃ/. Once again, these two consonants don’t exist in Spanish. They prove difficult for Spanish speakers, especially the /ʃ/ consonant. Technically speaking, the /tʃ/ does exist, just without as much expulsion. On the other hand, /ʃ/ only exists in telling someone to be quiet, but it is not used as a consonant in speech. Since /ʃ/ does exist in telling someone to be quiet, I leverage this in this video. I also pull from personal experience—being familiar with borrowed words, such as “sushi,” where Spanish speakers produce /ʃ/ as /tʃ/. “Sushi” becomes the star of the show, as it serves as a clear example of how /ʃ/ gets converted to /tʃ/. Again, minimal pairs are practiced, and interactive receptive activities are played.

The fourth video is about the consonants /dʒ/ and /y/. Examples include “jam” (/dʒ/) & and “yellow” (/y/). The /y/ sound does not exist in Spanish, meanwhile a type /dʒ/ does. Once again, the English /dʒ/ is more forceful. I cover this, and then focus on the /y/ sound. The /y/ sound doesn’t exist, and so more time is spent uncovering how to produce it. I also use an effective method of explaining the /y/ sound to Spanish speakers, by writing it orthographically how Spanish speakers might produce it, namely writing “yes” like /iiés/. Many such examples are covered. I also analyze what our tongues are doing, with pictures, comparing /dʒ/ and /y/.

The fifth video is about the consonants /s/ and /z/. /z/ is a consonant that doesn’t exist in Spanish. The /s/ sound does exist in Spanish, and thankfully we can use this consonant to aim for

/z/. Firstly, it is important that Spanish speakers can be receptive to the sonic differences between /s/ and /z/. Then, I explain a very important concept in /z/ sound production, which is that, even when a word is spelled with “s”, such as “cans,” often the “s” is pronounced like a /z/. Herein I explain the linguistic importance of attaching /z/ sounds to words, to not lose intelligibility. This is very important in words such as, “as”, “was”, “is”, “these”, and others. I explain two rules surrounding this, as well as a rule of thumb. We also practice this several times using these rules. Again, minimal pairs are practiced, and interactive receptive activities are played.

The sixth video is about consonant clusters starting with the /s/ consonant. In this video I begin to cover linguistic constraints, a topic I develop more later in the series. The main premise I hope to share is that Spanish can’t easily produce consonant clusters starting with the /s/ consonant, but that English can and often does. Many words, such as “Spanish” have equivalents such as “español” which evidences this difficulty. A trick to practicing the initial /s/ cluster sound is explored. Students are also tasked to listen and distinguish the difference between “star” and “estar”, aiming to produce the former. Fun practice sentences are then covered.

The seventh video is about syllable structure, comparing Spanish to English. I cover the difference between open syllables and closed syllables. I then compare the different constraints English and Spanish have, analyzing why consonant clusters prove difficult for Spanish speakers. The differences between English and Spanish are further evidenced by comparing similar syllable combinations found in Spanish and English words, such as “tree” and “triturar”. I also practice consonant clusters by having student listen and repeat a consonant cluster rich poem.

The eighth video is about American English vowels. It introduces all the many vowels and compares them to the Spanish vowels. It also discusses differences between vowels and

consonants. Especially important, I discuss the characteristics of tense vowels and lax vowels, comparing Spanish's tendency towards tenseness versus English's tendency towards laxness. I used many images that help listeners understand the difference on a spectral level. I also cover alphabet vowels versus relative vowels and compare this to the important A E I O U vowels that Spanish has. I didn't cover diphthongs because, according to Linda (2010) English diphthongs are very similar to Spanish diphthongs.

The ninth video proves to be a more humorous video as I embark upon differentiating /ey/ and /I/. As you may be aware, students struggle producing the /ey/ sound, as it requires an extended vowel sound, and without the emphasis on the subtle emphasis, the word "beach" can be heard as the word "b***h". Also, the word "sheet" can be heard as "s**t". Of special interest, I use minimal pairs to differentiate not English from English, but English from Spanish. I take words like "lean" and "linda" to help students become aware of a difference. I also write "lean" orthographically like "líin," like what I did with the /y/ sound. I then look at tongue placement. I then have students view my mouth, and repeat key words after me.

The tenth video is about the two American English vowels /æ/ and /ɛ/. Examples of /æ/ and /ɛ/ can be found in the words, "cat" and "elephant". Similar to the previous video, I have students notice the difference between similar Spanish vowels and the target English vowels. I make use of charts, like in previous videos. I also cover the placement of the tongue in the mouth. I also introduce the concept of stress, as it affects individual word intelligibility; this is carried further in the next video. Lastly, I discuss the way final voiced consonants affect vowel coloration; the example given is "jack" versus "jam". Of note, I begin speaking more Spanish in these videos.

The eleventh video is about the two American English Vowels /ə/ and /ɒ/. The main star of the show is the introduction of /ə/, otherwise known as Schwa. I work out a minimal pair, differentiating the two vowels, and discuss the difference of tongue placement and vowel production. I focus more attention on the Schwa and zoom into how the sound is produced; of importance is discussion of lax vowels. I explain the importance of Schwa and how all unstressed vowels tend towards it. I also explain how it is the most common English vowel and how important it is for listening to native English speakers.

In the twelfth video I cover reduced vowels in speech. I begin by abstracting stress apart from semantic meaning. I use examples of *DA* and *da*, representing stressed and unstressed. In many ways I am further introducing the concept of stress, and then, beyond this, I am focusing students' attention on the unstressed aspect of different words. I also introduce reduced vowels (beyond just the Schwa) and have them compare production qualities of vowels either stressed or reduced; for example: "tick" vs "attic". I also introduce the concept of function versus content words. Lastly, I include a practice story, in the comments, where students can identify reduced words and vowels, in an original piece writing.

The thirteenth video tries covering all American English vowels (non-diphthongs) and attach significance to them by matching them with a memorable animal. This video was inspired from Celce-Murcia et al (2010), as well as by the methodology of the Silent Way, where students circumvent the IPA alphabet to memorize word vowel correspondence. The general idea is that, students can aim their practice towards memorizing animals, and hold that there is a difference between them all, even when they can't reliably hear all the differences. I also explain the importance of producing accurate vowels within stressed syllables. I then have students practice

identifying the vowel of the stressed syllable within several practice words, associating them with the animals correlated with these vowels.

The fourteenth video is about vowel differences between voiced final consonants and unvoiced final consonants. Of most importance is the concept that not only correct consonants, or correct vowels influence intelligibility. Features such as vowel length, or vowel coloration, also influence intelligibility. I also include a visual spectral representation of a minimal pair of words, where one vowel is shown to be longer than the other. I also explain the trick that if we have trouble producing a voiced consonant, such as /z/, then by simply elongating a vowel duration, then listeners will automatically think you have produced a voiced consonant; on the flipside, if you don't elongate your vowels, but do produce a correct voiced consonant ending, then they will mishear you, even if all else is produced accurately.

The fifteenth video is about stress and pitch, in which I focus on the various components that make up stressed syllables. These include volume, vowel duration, and pitch. I focus on two words, master their stress, and place them within a sentence. Within this, as a call back, I have students identify the correct vowel within the word, using the animals from the previous video to help contextualize them. Various visual representations are used to represent stress, something that will be continued in later videos. Within this video I am also introducing stress within multiple words, not just within single words. This leads into the next video, highlighting sentence stress.

The sixteenth video is about highlighting. In this video, I describe the features that comprise highlighting the most important part of a sentence. This is especially important for Spanish speakers because, often they will not stress main words enough, and not reduce unstressed syllables enough. This is a recipe for miscommunication. Without emphasizing the

most important things, and deemphasizing the less important things, native English listeners will quickly become confused, and lose their focus. The native speaker's brain depends on highlighting. I use several modalities in order to communicate highlighting in a sentence; I also have students practice deciding which part of a sentence should be highlighted.

The seventeenth video is about linking. I cover five different linking strategies. This serves as an introduction to linking—but also helps explain features of linking that students might be only half-aware of. Because linking is used very often by native speakers, it is important for both English listening and pronunciation. One benefit from focusing on linking is that it makes speaking easier. Many of the features of linking help facilitate difficult pronunciation, especially for difficult consonant clusters, which proves difficult for Spanish speakers. At the end, students decide what two rules comprise the expression “dog eat dog world”, or as it is often pronounced, “doggy dog world.”

The eighteenth video is about contractions. These are different from what students might assume contraction always refers to. These are contractions that are never written down, but often spoken. They differ from linking rules, in that they don’t follow the same rules. They share similarities with linking, in that they help make speaking easier; less work needs to be put into producing utterances. They might seem off-putting, especially if they have never been covered, but it serves to help decipher fast speech of native English speakers. Lastly, I used written representations of several common verbal contractions, to help show how they can exist in speech, but how they would never appear in professional writing.

The nineteenth video is about linguistic assimilation. This has nothing to do with cultural assimilation, but everything to do with syllables or words changing / palatalizing adjacent syllables or words. This differs from linking and contractions but serves to further highlight the

many ways English speakers make speaking easier, or their unique habits of simplifying speech. I cover progressive assimilation, regressive assimilation, and coalescent assimilation. I have students practice each. I utilize arrows, pictures, and colors. I cover the /d/ and /t/ rule surrounding correctly pronouncing past tense endings, seeing it is a product of progressive assimilation. Lastly, I cover palatalization, and have students practice producing phrases with palatalization.

American English Pronunciation

	Title	Skills	Run Time
Episode 1	/b/ & /v/ (berry vs very)	This first video is about the consonant /v/ as in “very”.	16:27
Episode 2	/θ/ & /ð/ (the TH sound)	This second video is about the /th/ consonants, /θ/ and /ð/.	21:49
Episode 3	/tʃ/ & /ʃ/ (sushi?) 🍣	This third video is about the consonants /tʃ/ and /ʃ/.	18:39
Episode 4	/dʒ/ & /y/ (Jumbo 🐘)	This fourth video is about the consonants /dʒ/ and /y/.	21:39
Episode 5	s/ & /z/ ("sssss" vs "zzzzz")	This fifth video is about the consonants /s/ and /z/.	19:27
Episode 6	/s/ Consonant Clusters (str & sk)	This sixth video is about consonant clusters starting with the /s/ consonant.	10:44

Episode 7	Syllable Structure (español vs English)	This seventh video is about syllable structure, comparing Spanish to English.	19:04
Episode 8	Introduction to American English Vowels	This eighth video is about American English vowels.	14:45
Episode 9	/ey/ & /I/ (beach & sheet) 🧐	This ninth video proves to be a more humorous video as I embark upon differentiating /ey/ and /I/.	12:50
Episode 10	/æ/ & /ɛ/ ⚡ 🐈	This tenth video is about the two American English vowels /æ/ and /ɛ/.	18:00
Episode 11	/ə/ & /ɒ/ (intro to Schwa: ə)	This eleventh video is about the two American English Vowels /ə/ and /ɒ/.	21:44
Episode 12	Reduced Vowels (an English enigma)	In this twelfth video I cover reduced vowels in speech.	14:34
Episode 13	Word Stress & Vowels	This thirteenth video tries covering all American English vowels (non-diphthongs) and attach significance to them by matching them with a memorable animal.	17:26

Episode 14	Vowel Length Differences (bag vs back)	The fourteenth video is about vowel differences between voiced final consonants and unvoiced final consonants.	14:34
Episode 15	Stress & Pitch	This fifteenth video is about stress and pitch, in which I focus on the various components that make up stressed syllables.	5:42
Episode 16	Highlighting	This sixteenth video is about highlighting.	16:07
Episode 17	Linking (smooth like butter) 😎	This seventeenth video is about linking.	18:15
Episode 18	Contractions (that'll and this's)	This eighteenth video is about contractions.	13:44
Episode 19	Assimilation (wha' chu should know)	This nineteenth video is about linguistic assimilation.	17:17

Development of the Project

The development of this project took the form of much research into difficulties Spanish speakers face in learning American English pronunciation. After establishing key difficulties within both segmental and suprasegmental pronunciation features, I set out to create numerous interactive lectures, using Google Slides, and using royalty free images. The entirety of creating all this lecture material was an arduous process. During the process, I questioned my own understanding and dug deeper into each subject. Once I went from segmental to suprasegmental,

I chose to stop after creating 19 lectures. I then peer reviewed all the slides, edited them, and prepared myself for recording myself lecturing through the slides.

The process involved in recording myself was shaped by my desire to create excellent audio and video footage. I used a podcasting microphone, as well as a vlogging digital camera; the combination was coordinated using the software OBS, which helped route audio, so I could listen to myself as I spoke, and so I could move myself around (camera frame-wise). I took several takes to get the footage I finally ended with. I added a humorous touch of changing my shirt for every video, to make it seem like multiple days were elapsing. In truth I recorded all the footage over the course of four days. I then uploaded all the footage into Final Cut, a video editing software, and edited them, then exported them. Before exporting them, I created intro slides and outro slides; overtop these specific slides I added ambient music audio, which gave further coherence to the project. The process of creating a playlist on YouTube also proved arduous, as the upload time was upwards of seven hours. All this finished, the total series runs for over five hours, and it is freely accessible on YouTube.

Also unique to this video project is my choice of including spoken Spanish as well as written Spanish in the intro and outro slides. I made this choice, which cuts into the viewability of the videos, as mostly only Spanish speakers, and mostly only Chileans might completely be able access them. I wanted to create this series as focused on Chilean students, in an effort to create a target audience, and thus to better serve a smaller niche. I utilized my understanding of Chilean culture and language features, both from what I researched, as well as from what I learned growing up visiting family—and coalesced it all into the following series.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Perhaps of highest importance, different contexts have different demands for pronunciation classes. Further research is needed (along with experience) to ascertain the specific needs of students within specific EFL settings, let alone in Chile. This said, there is a gap in research on EFL teaching in Chile; research must be based on EFL teaching in other contexts, this research must then be applied to Chile specifically.

Furthermore, it is not only important to understand different contexts, but also to understand different student needs. This is useful because it helps set realistic goals for pronunciation teaching. In sum, every setting is different, and every student is seeking different results for different purposes.

Moreover, though I conducted a Contrastive Analysis of English and Spanish, I am by no means a linguist, nor do I have expert knowledge of the phonetic system of Spanish. This field project proved effective in commencing a comparative linguistic study with the purpose of teaching to a specific linguistic group, namely Spanish.

Importantly, I believe my research needs to be utilized and refined. The videos and lessons need to be tested with students. Many activities used in the videos were adapted from textbooks as well as from videos related to the subject—but they have yet to be tested for engagement or effectiveness. On a positive note, creating all these videos informed me of the work required to create and record lecture videos—thus making re-iterations easier.

Also, a key take-away from this project is how theories can be applied as useful tools for instruction. The tool must be understood, and its strengths should be known, along with its limitations. The Contrastive Analysis, for example, should never be the only lens through which to view pronunciation teaching, but it does prove to be very generative.

Recommendations

As stated, further work should be done to evaluate the effectiveness of video lectures. Especially within the realm of digital education, the use of online courses should be explored, since they are interactive and self-paced, and since they are better able to house quizzes and assessments. Due to limits of time and personal experience, I couldn't create such an online classroom ecosystem; I would recommend this next step to future researchers.

Other limitations include the fact that, though many variables covered in my specialized pronunciation video-course prove useful for other linguistic groups, I've focused solely on resources for one linguistic group. When working with students from other groups, I would not be able to share these videos, as they clearly are not the intended audience. Still, this type of specialized pronunciation instruction would be helpful for English learners of all linguistic backgrounds. It is a strong recommendation that educators create similar materials for native speakers of other languages.

Also, further research should ascertain whether the Contrastive Analysis is realistic outside of EFL settings. Many peers, working within English language learning classrooms, have expressed interest in learning how to apply a Contrastive Analysis for their own students. The reality is that English language learning classrooms are much more linguistically diverse than EFL settings. This would make it very challenging to realistically implement targeted

Contrastive Analysis-based materials. Further research and material development are highly recommended.

REFERENCES

Badin, P., Tarabalka, Y., Elisei, F., & Bailly, G. (2010). *Can you 'read' tongue movements? evaluation of the contribution of tongue display to speech understanding.* Speech Communication, 52(6), 493–503. https://doi.org/10.1016/j.specom.2010.03.002

Banathy, B., & Madarasz, P. (1969). *Contrastive analysis and error analysis.* J Engl Second Lang, 4, 2, 77-92.

De Bot, K. (1983). *Visual feedback of intonation I: Effectiveness and induced practice behavior.* Language and Speech, 26(4), 331–350. https://doi.org/10.1177/002383098302600402

Broselow, E. (1984). *An Investigation of Transfer in Second Language Phonology.* IRAL. International Review of Applied Linguistics in Language Teaching, 22(4), 253–269.

Brown, A. (1992). *Teaching English pronunciation: A book of Readings.* London: Routledge.

Castillo Lozano, J. A., & Areiza Restrepo, H. N. (Director de T. o T. de G. (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 fonética* [Master's thesis, Universidad de Valle]. BASE.

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation: A reference for teachers of English speakers of other languages*. Cambridge University Press.

Corder, S. (1975). *Error Analysis, Interlanguage and Second Language Acquisition*. Language Teaching & Linguistics: Abstracts, 8(4), 201-218. doi:10.1017/S0261444800002822

Corder, S. P. (1992). *A Role for the Mother Tongue*. In S. M. Gass & L. Selinker (Eds.), Language Transfer in Language Learning (pp. 18–31). John Benjamins Publishing Company. https://doi.org/10.1075/lald.5.04cor

Coe, N. (2001). *Speakers of Spanish and Catalan*. Cambridge University Press. https://doi.org/10.1017/cbo9780511667121.008

Dale, P., & Poms, L. (1985). *English pronunciation for Spanish speakers: Vowels*. Prentice Hall Regents.

Dauer, R. M. (2005). *The Lingua Franca Core: A New Model for Pronunciation Instruction?* TESOL Quarterly, 39(3), 543–550. https://doi.org/10.2307/3588494

Dauer, R. M., & Browne, S. C. (1992). *Teaching the Pronunciation of Connected Speech*. [Paper presentation]. Annual Meeting of the Teachers of English to Speakers of Other Languages. https://files.eric.ed.gov/fulltext/ED354777.pdf

Derwing, T. M., & Munro, M. J. (2005). *Second Language Accent and Pronunciation Teaching: A Research-Based Approach*. TESOL Quarterly, 39(3), 379–397. https://doi.org/10.2307/3588486

Derwing, T. M., & Rossiter, M. J. (2003). *The Effects of Pronunciation Instruction on the Accuracy, Fluency, and Complexity of L2 Accented Speech*. Applied Language Learning, 13(1), 1–17.

Eckman, F. R. (1977). *Markedness and the Contrastive Analysis Hypothesis.* Language Learning, 27(2), 315–330. https://doi.org/10.1111/j.1467-1770.1977.tb00124.x

Eckman, F. R. (1991). *The structural conformity hypothesis and the acquisition of consonant clusters in the interlanguage of ESL learners*. Studies in Second Language Acquisition, 13(1), 23–41. https://doi.org/10.1017/s0272263100009700

Dinnsen, D. A., & Eckman, F. R. (1978). *Some substantive universals in atomic phonology.* Lingua, 45(1), 1–14. https://doi.org/10.1016/0024-3841(78)90017-7

Elliott, A. R. (1995). *Foreign Language Phonology: Field Independence, Attitude, and the Success of Formal Instruction in Spanish Pronunciation*. The Modern Language Journal, 79(4), 530–542. https://doi.org/10.2307/330005

Garcia, G. D. (2021). *Data Visualization and analysis in Second language research.* Routledge.

Gilbert, J. (2001). *Pronunciation as orphan: what can be done?* Speak Out! Retrieved from: https://www.tesol.org/docs/default-source/new-resource-library/pronunciation-as-orphan-what-we-can-do-about-it-.pdf?sfvrsn=0

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.

Gómez González, M. & Sánchez Roura, T. (2016). *English Pronunciation for Speakers of Spanish: From Theory to Practice*. Berlin, Boston: De Gruyter Mouton. https://doi.org/10.1515/9781501510977

Gonzales, C. (2012). *Native speakers of Spanish learning English: The phonetic problems that may arise and some possible solutions*. p.1-14. Retrieved from: http://coreygonzales.weebly.com.

Grant, K.W., & Greenberg, S. (2001). *Speech intelligibility derived from asynchronous processing of auditory-visual information*. *AVSP*.

Han, Z. (2004). *Fossilization: Five Central Issues*. International Journal of Applied Linguistics, 14(2), 212–242. https://doi.org/10.1111/j.1473-4192.2004.00060.x

Hinofotis, F. B., & Bailey, K. M. (1981). *American Undergraduates' Reactions to the Communication Skills of Foreign Teaching Assistants.* In J. C. Fisher, M. A. Clarke, & J. Schachter (Eds.), On TESOL '80: Building Bridges: Research and Practice in Teaching English as a Second Language (pp. 120–136). Teachers of Eng. to Speakers of Other Langs.

Hucke, N. (2021). *Phonology and fluency: How pronunciation is (and is not) taught in United States ESL classrooms*. [Honors Program Thesis, UNI ScholarWorks]. BASE.

Jakobson, R. (2014). *Child Language, Aphasia and Phonological Universals.* Berlin, Boston: De Gruyter Mouton. https://doi.org/10.1515/9783111353562

Jenkins, J. (2000) *The phonology of English as an international language: new models, new norms, new goals.* Oxford University Press.

Jenkins, J. (2006). *Current Perspectives on Teaching World Englishes and English as a Lingua Franca*. TESOL Quarterly, 40(1), 157–181. https://doi.org/10.2307/40264515

Kjellin, Olle. (1999). *Accent Addition: Prosody and Perception Facilitate Second Language Learning*. The Karolinum Press.

Kolesnikova, O. (2017). *Comparative analysis of American English and Mexican Spanish consonants for computer assisted pronunciation training*. Revista Signos, 50(94), 195–216. https://doi.org/10.4067/S0718-09342017000200195

Charlene J. Sato. (2006). *Phonological Processes in Second Language Acquisition: Another Look at Interlanguage Syllable Structure*. Language Learning, 34, 43–58.

Selinker, L. (1972). *Interlanguage*. IRAL - International Review of Applied Linguistics in Language Teaching, 10(1-4). https://doi.org/10.1515/iral.1972.10.1-4.209

Smith, L., & Nelson, C. (1985). *International intelligibility of English: Directions and resources.* World Englishes, 4, 333-342

Snow, M.A., Kamhi-Stein, L.D., & Brinton, D.M. (2006). *Teacher training for English as a lingua franca*. Annual Review of Applied Linguistics, 26, 261-281.

Tarone, E. (1987). *The phonology of interlanguage*. In G. Ioup & S. H. Weinberger (eds.), Interlanguage phonology: The acquisition of a second language sound system. New York: Newbury House.

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.

Lane, L. (2010). *Tips for teaching pronunciation: A practical approach.* Pearson Education.

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.

Macdonald, S. (2002). *Pronunciation - views and practices of reluctant teachers.* Prospect : An Australian Journal of TESOL, 17, 3–18.

Macpherson, I. R. (1975). *Spanish phonology: Descriptive and historical.* Manchester University Press.

Morley, J. (1999). *New developments in speech/pronunciation instruction.* As We Speak, 2, 1-4.

Odisho, E. (1992). *A Comparative Study of English and Spanish Vowel Systems: Theoretical and Practical Implications for Teaching Pronunciation.* Northeastern Illinois University.

Olson, D. J. (2014). *Phonetics and technology in the classroom: A practical approach to using speech analysis software in second-language pronunciation instruction.* Hispania 97(1), 47-68. http://dx.doi.org/10.1353/hpn.2014.0030

García Pérez, G. M. (2005). *Perception of English Vowels by Native Speakers of Spanish in a Regular Classroom Setting.* Revista Virtual de Estudos Da Linguagem, 3(5), 1–9.

Piorno, I. (2018). *Integrating Language Awareness into Pedagogy: A Contrastive Analysis Between English and Spanish to Support English-Language Learners.* Notos, 14(1), 32–37.

Jack C. Richards, & Richard W. Schmidt. (2013). *Longman Dictionary of Language Teaching and Applied Linguistics.* Routledge.

Rogerson-Revell, P. M. (2021). *Computer-Assisted Pronunciation Training (CAPT): Current Issues and Future Directions*. RELC Journal: A Journal of Language Teaching and Research, 52(1), 189–205.

Walker, R. (2001). *Pronunciation priorities, the lingua franca core, and monolingual groups.* Speak Out! Newletter of the IATEFL Pronunciation Special Interest Group, 28, 4-9.

Wardhaugh, R. (1970). *The Contrastive Analysis Hypothesis.* TESOL Quarterly, 4(2), 123. https://doi.org/10.2307/3586182

Vera, K. J. (2014). *Fenómenos de Reducción Vocálica por hablantes Colombianos de Inglés Como L2: Un estudio acústico.* Forma y Función, 27(1), 11–43. https://doi.org/10.15446/fyf.v27n1.46940

Zielinski, B. W. (2008). *The listener: No longer the silent partner in reduced intelligibility.* System, 36(1), 69–84. https://doi.org/10.1016/j.system.2007.11.004