Title
Segmental and Intonational Evidence for a Los Angeles Chicano Spanish Vernacular

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Publication Date
2012

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Segmental and Intonational Evidence for a Los Angeles Chicano Spanish Vernacular

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Hispanic Languages and Literatures

by

Argelia Andrade

2012

ABSTRACT OF THE DISSERTATION

Segmental and Intonational Evidence

for a Los Angeles Chicano Spanish Vernacular

by

Argelia Andrade

Doctor of Philosophy in Hispanic Languages and Literatures

University of California, Los Angeles, 2012

Professor Claudia Parodi-Lewin, Co-chair

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This dissertation has two complementary objectives. First, the present study provides a contemporary reading of *hispanista* research about Mexican Spanish, including Chicano Spanish. This objective seeks to invite current research programs about Mexican and Chicano Spanish to be better versed about Mexican and Chicano Spanish dialectology and research. In addition, this dissertation presents an overview and analysis of intonational findings of both Mexican Spanish (from the Los Altos region in Jalisco) and Chicano Spanish (from Los Angeles, California), based on original data. Using experimental and naturalistic data, this study provides evidence for the existence of a Los Angeles Chicano Spanish vernacular.

Broad and narrow focus declaratives, wh and yes-no interrogatives, as well as spontaneous speech were examined and are described using the Tones and Breaks Indices system

(ToBI). The examination provides a preliminary phonological label of the observed tones and a description of the observed contours for the aforementioned sentence types spoken by Salvadoran Americans and Mexican Americans living in Los Angeles. In general, independently of the Spanish spoken at home (Salvadoran or Mexican Spanish), especially in scripted data, the tonal patterns of Angelenos were found to be similar. This provides strong evidence for the existence of a Los Angeles Chicano Spanish vernacular, a Spanish that is acquired by Angelenos, regardless of their home dialect.

The findings for the Mexican Spanish data indicate the following: 1) The default pre-nuclear pitch accent is L*+H (L*+!H). 2) The nuclear pitch accent in declaratives is H* (!H*) and L* in interrogatives. Since this dialect optionally employs pauses as part of its focus strategy, L+H* and L+^H* are sometimes used as nuclear pitch accents (when they mark the focus item and the contour has a break). 3) In utterances with narrow focus and default word order, L+H* is used (followed by pause and pitch reset or by no pause and deaccenting). Alternatively, in narrow focus declaratives with topicalization, L+^H* (followed by a pause and pitch reset) or L*+^H (without a pause but with deaccenting) is used. 4) The boundary tones are H% (in questions) and L% (in declaratives). 5) Phonological events such as tone clash and tone lapse shape the intonational excursion. Tone lapse employs L*+>H (L*+>!H) while tone clash uses L+H*, H* (!H*), or L*+^H.

The findings for the Chicano Spanish data indicate the following: 1) The default pre-nuclear pitch accent is L*+H (L*+!H). 2) The nuclear pitch accent in declaratives is H* (!H*) and L* in interrogatives. 3) In utterances with narrow focus and default word order, pauses are not commonly utilized to focus. Instead, L+H* is used (followed by deaccenting). Alternatively, L+^H* (followed by deaccenting) or !H*, a truncated version of one of the tones, is used. 4) The

boundary tones are H%, L% or M%. 5) Phonological events such as tone clash and tone lapse shape the intonational excursion. Tope lapse employs L*+>H (L*+>!H) while tone clash uses H* (!H*).

The table on the following page summarizes the findings explained in this dissertation. To the extent that Mexican Spanish and Chicano Spanish are melodically different, this study provides important evidence proving the existence of a dynamic language-contact vernacular (termed *Chicano Spanish* in this dissertation). Furthermore, since Salvadoran-Americans and Mexican-Americans produced the same intonational patterns regardless of their home dialect, Chicano Spanish must exist and is actively used as part of the linguistic tool-kit of Angelenos.

Taking the *hispanista* tradition as its springboard, this dissertation adds data to traditional Spanish-language research (dialectology) as well as engages in recent research developments on intonational phonology. Furthermore, the current dissertation illustrates clear applications of modern linguistic models to broader queries, such as the existence of language-contact vernacular dialects.

	Mexican Spanish	**Chicano Spanish**
Pre-nuclear	L*+H (L*+!H)	L*+H (L*+!H)
Tone Lapse	L*+>H (L*+>!H)	L*+>H (L*+>!H)
Tone Clash	L+H* H* (!H*) L*+^H	H* (!H*) Truncation of one of the bitones
Focus	Declaratives: L+H* + pause (pitch reset) L+H* + deaccenting L+^H* + pause (pitch reset) L*+^H + deaccenting Interrogatives: L*	Declaratives: L+H* + deaccenting L+^H* + deaccenting !H* Interrogatives: L+H* L*
Nuclear	Declaratives: H* (!H*) Focus (pause causes focused word to be in nuclear position): L+H* L+^H* Interrogatives: L*	Declaratives: H* (!H*) Interrogatives: L*
Boundary	H% L%	H% L% M%
Other observations	Wider contour in scripted sentences (100+ Hertz) Optional Pause after focus (common technique) Wh-questions are characterized by uptrend (H%) Continuation rise not widely used	Reduced contour in scripted sentences (50+ Hertz) Uncommon pause after focus (pause never produced in scripted data) Wh-questions are characterized by downtrend (L%) Continuation rise widely used

The dissertation of Argelia Andrade is approved.

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ACKNOWLEDGEMENTS

I would like to acknowledge many people. Academically, I am most grateful to Professor Claudia Parodi, who has been a mentor and friend since I took my first linguistics class at UCLA as an undergraduate. Since becoming her student, my academic life has been greatly enriched. The opportunity to access high security archives, to present in numerous academic conferences, to publish in Mexico, Europe, and the United States, and to teach an array of academic courses are a few of the opportunities that her mentorship has given me. Her profound knowledge of everything related to the Spanish language, her unmatched work ethic, and her willingness to discuss my work at every step of the way have been very important. I am very grateful to Professor Sun-Ah Jun, whose teachings on intonation have been life-changing and who has honored my dissertation by providing insight and by guiding my analysis with questions and feedback. Dr. Jun was instrumental in my analysis and provided important moral support during key moments in my academic life. I would also like to acknowledge Professors Carlos Quícoli and María Teresa Zubiaurre, who have enriched my academic career and this dissertation with diverse questions and comments, for which I am very grateful.

My friends back at home (Gardena, CA) have also provided important support. I am most grateful to Elizabeth Martínez, Julio Delgado, and Rosa Segura for providing emotional support throughout the years. Their acceptance and candid friendship has provided endless motivation and loving reality-checks. In addition, they have provided Nuestras Raíces with great leadership when I have had to be away. I would also like to thank my students, family, and friends at Nuestras Raíces for inspiring me to lead by example. My life has been filled with love and strength thanks to all of you.

Lastly, I would like to acknowledge my family. In particular, I would to acknowledge my mother (Celina), my sister (Darlene), my mother-in-law (Bea), my father-in-law (Mario), and my loving and patient husband (Andrés), have provided instrumental support and love throughout this process. During the last two months of my dissertation year fellowship, my father became ill. Naturally, I put the last chapter of this dissertation on hold and spent the last eight weeks of my father's life by his side, a decision that I have never regretted. Since then, it has been very difficult to write again. My toddler's impressive use of Chicano Spanish and English has recently inspired me to honor my father's life by finishing my dissertation. Thank you, Dante, for giving me the necessary emotional boost to finish this project. Thank you, Andrés, for your endless patience, support, acceptance, and love.

I lovingly dedicate this dissertation to my father, Jorge Andrade, my first coach and mentor.

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Chapter 1

INTRODUCTION

1. Background

1.1 Linguistic Overview

Spanish has been spoken in what is now the United States of America longer than English. According to Amastae and Elías-Olivares (1982), settlements of Spanish speakers in Florida date as early as 1565. This predates those of English speakers in New England, which first settled in 1585 (Amastae & Elías-Olivares, 1982). Spanish and Mexican settlements in California occurred much later, in 1769. Nevertheless, Spanish was spoken in California eighty years before the Gold Rush brought English-speaking immigrants to this area (Amastae & Elías-Olivares, 1982).

The importance of the Spanish language in the United States remains visible today. According to the *Language Use in the United States: 2007* report of the United States Census written by Shin and Kominski (2010), the United States has a population of almost 309 million people. This report also finds that, of the 55.4 million people living in the United States who speak a language other than English, 62% speak Spanish (about 34.5 million speakers). Simply stated, the United States of America is home to the fifth largest Spanish-speaking population in the planet (Villa, 2002).

California, with a population of 34 million in the year 2007, reported that 42.6% of its population speaks a language other than English at home (Shin & Kominski, 2010). According to their *Language Use in the United States: 2007* report of the United States Census, after Spanish, the languages with the largest number of speakers (between 1.2 and 1.6%) in California are:

Vietnamese, Chinese, a variety of Slavic languages (Russian, Polish, and Serbo-Croatian), Korean, and Tagalog. Shin and Kominski (2000) report that almost 30% of California's residents speak Spanish, making Spanish the second most-spoken language by Californians after English.

Los Angeles is even more linguistically diverse than California. The city of Los Angeles proper reported that 43.5% of its residents spoke Spanish (Shin & Kominski, 2010). Specific cities within the county of Los Angles report higher numbers. For example, Santa Ana (71%), Baldwin Park (67.8%), Downey (64.6%), El Monte (57.3%), and Pomona (55.8%), to name a few (Shin & Kominski, 2010).

These numbers and percentages are likely dwarfed by two factors. First, the United States continues to enjoy a steady waive of immigration that hasn't been accounted for since the aforementioned report was published. Second, many immigrant populations are hesitant to participate in the census as they are unfamiliar with the process and are untrusting of the privacy measures taken to protect their identities. In spite of this, clearly, Los Angeles, California, is the ideal environment for the scholar who is interested in completing a study involving languages in contact.

1.2 The Speech Community

Arriving at a useful definition of the *speech community* of Los Angeles is difficult. Haeri's (2003) research on a diglossic community in Egypt, for example, finds that, for the population that he studied, one language does not equal one linguistic community. Santa Ana looks at cross-disciplinary definitions and reports that the overarching theme in defining a speech community across disciplines involves "shared norms for interpretation or use of language" (1991, p.13). Labov's concept of speech community, defined as "[the] participation in a set of

shared norms ... [which] may be observed in overt types of evaluative behavior, and [in] the uniformity of abstract patterns of variation" (1972, p.120-121), is perhaps the most influential conceptualization of the speech community since it has directly inspired a methodology used in scores of empirical studies. Hymes (1972, 1974), Gumperz (1962, 1972), Fishman (1967, 1968), Parodi and Santa Ana (1997) and many others have used Labov's conceptualization of the speech community to guide their research. For an extensive account of the term, please see Patrick (2002).

In the case of Spanish-speaking Los Angles, the concept of the speech community will be guided by the aforementioned scholarship. Thus, a speaker's use of the local Spanish vernacular indicates membership in the Los Angeles Chicano Spanish linguistic community. This idea is supported directly in the work of Labov (1966). According to Labov, stratified societies create subgroups of people who exhibit accord in their use and interpretation of socially valued variables (1966, p. 53). To the extent that a given group does not participate in the production and reproduction of a second group's phonological system, for example, the groups in question belong to different linguistic communities.

Important scholarship has conceptualized the population of Chicanos/as living in Los Angeles as a separate speech community from other Angeleno speech communities (Wald, 1981; García, 1984; Santa Ana, 1991). However, their research programs have focused on the English spoken by this speech community. The present dissertation proposes to use the Spanish spoken by Angelenos to define the Los Angeles Chicano Spanish linguistic community.

1.3 Spanish-speaking Los Angeles

Most scholars agree that the dialect of the original settlers establishes the language spoken in a given area (Santa Ana, 1991; Mufwene 2001). However, the complex linguistic and cultural make-up of Los Angeles makes it a unique counter example to this linguistic norm. Although early settlers to Los Angeles were both Spanish and Mexican, the influence of Peninsular Spanish in the area is difficult to ascertain. Peninsular Spanish has been found to be more influential in other areas of the Southwest such as New Mexico. The influence of Mexican Spanish in Los Angeles has been especially noticeable in the latter half of the twentieth century, when immigration patterns to Los Angeles changed significantly, from United States Southerners and Midwesterners to foreign-born Asian and Hispanic populations (Santa Ana, 1991, p.10).

Characterizing the language of Spanish-speaking Los Angeles is an ambitious goal. In most cases, Los Angeles Chicano Spanish speakers are proficient in an array of varieties and registers of Spanish and English. In fact, as Santa Ana asserts, "There is an 'anguish of definition,' since the speech community… is qualitatively different and more complex than other ethnic dialects such as Black English because two languages are involved" (1991, p. 1).

Characterizing the population of Spanish-speaking Los Angeles is another difficult task. Many people who grow up in the greater Los Angeles area would not term themselves "Chicano/a", for example, deferring to terms such as "Mexican", "Hispanic", or "Latino". However, the present dissertation refers to the Los Angeles Spanish spoken by Mexicans, Mexican-Americans, Latin Americans, and anyone else who adopts the local Spanish dialect, as LOS ANGELES CHICANO SPANISH. Los Angeles Chicano Spanish is a variety spoken by Spanish speakers of different generations and proficiencies who, regardless of national, ethnic, or in-group association, have adopted the local neutralized vernacular defined herein. The idea of a

neutralized version of Spanish shared by Angelenos of different backgrounds is not new. Parodi (2003), who explores this topic in relation to key phonological features and the lexicon, proposes that Los Angeles is home to a neutralized version of Spanish that has been adopted widely. The present dissertation continues this line of research and centers its definition of Los Angeles Chicano Spanish in a study of its melodic patterns.

1.4 The Linguistic Baseline of Los Angeles Spanish

Added to the established Spanish that existed prior to the Treaty of Guadalupe Hidalgo, a more important contributor to the area's Spanish is the significant wave of Mexican immigration from Michoacán, Zacatecas, Guanajuato and Jalisco during the twentieth century (Samora, 1971; Bustamante, 1978; Parodi, 1993). Of these Mexican states, the most significant influence on Los Angles Spanish is Jaliscan Spanish (from Jalisco, Mexico) (Santa Ana, 1991). As stated in Santa Ana, "it can be asserted with reasonable certainty that rural Jaliscan is the Spanish-dialect baseline for California Chicanos" (1991, p. 18).

2. The Dissertation

This dissertation has very ambitious goals. First, it provides a comprehensive survey of Chicano Spanish and of Mexican Spanish as defined in the literature. It is hoped that the reader finds these chapters to be enlightening in their study of Spanish language linguistics as they highlight the most important findings about United States Spanish and Mexican Spanish published to date. In addition, the data presented in these studies has been transcribed using the International Phonetics Alphabet (IPA). Secondly, and most importantly, this dissertation theorizes that Los Angeles Chicano Spanish is a dialect in its own right. Defining the melodic

structure of this variety and showing that it categorically differs from other varieties of Spanish will evidence this fact. In attaining this goal, two other tasks were completed. First, a melodic study of the baseline dialect (Jaliscan Spanish) is presented. Secondly, intonational patterns of Angeleno Chicano Spanish are described. Many other linguistic aspects of this dialect such as vowel quality, consonantal mutation processes, codeswitching phenomena, etc. could have been explored in light of the data collected for this dissertation. These analyses are forthcoming (see chapter 8 for an example of such possible studies). However, given the aforementioned objectives, this dissertation will better advance the field of Spanish language research by limiting its efforts to a sound bibliographical survey of the language and a description of its melodic patterns based on original data.

The present dissertation is organized as follows: Chapter 2 outlines a definition of Chicano Spanish in light of investigations conducted on the topic. Chapter 3 gives an overview of Mexican Spanish dialectology, which enjoys a long tradition of research. Chapter 4 explains the theoretical framework used in analyzing melody. Chapter 5 details a study of Mexican Spanish intonation based on original data. Chapter 6 utilizes data gathered by the author in order to propose important aspects of Chicano Spanish intonation. Chapter 7 summarizes the findings presented in chapters 5 and 6. Lastly, chapter 8 foregrounds some queries and ideas for further research.

Chapter 2

CHICANO SPANISH

1. Introduction

The work by Chomsky (1957) alongside that of Labov (1966) changed language research forever. Chomsky is credited with the creation of the theory of generative grammar, often considered the most significant contribution to the field of theoretical linguistics of the twentieth century. Labov equally impacted language research by laying the foundation for the empirical study of language in the speech community. In the past fifty years, many scholars have taken up Chomsky and Labov's lines of research in their investigations.

Many years before, however, in 1909, Espinosa's study of United States Spanish was published. Espinosa (1909, 1911, 1917) wrote about New Mexican Spanish, formalizing the status of the dialect and making keen sociolinguistic observations. In this way, Espinosa was already addressing some of the concerns that would be wholly explored much later by Chomsky and Labov. Specifically, Espinosa provided a systematic description of the Spanish of New Mexico, including data on language mixing and other language contact linguistic phenomena.

Espinosa continued to publish studies on this dialect for many decades. Two decades after Espinosa's influential work, in 1933, Post published an article on Arizona Spanish. Ornstein (1951), Bowen (1952) and others continued this scholarly quest in the 1950s. Their work, like that of Espinosa, included important language contact topics such as borrowings, codeswitching, loan shifts and translations. Around this time, Navarro Tomás (1948) and López Morales (1968) published investigations on non-Southwest dialects of Spanish in the United States.

Alongside linguistic and sociolinguistic studies, a line of research concerned with addressing the so-called grammatical "mistakes" of Spanish speaking United States Latinos also emerged in the 1950s. For example, Baker (1953) published an "*Appendix Probi*-like document" (Teschner, Bills & Craddock, 1975) that provided examples of vernacular speech while suggesting how to correct the language spoken by heritage Spanish speakers.

The decades of the 60s and 70s placed bilingual education and United States Spanish research on the forefront of linguistic investigations, producing works by scholars such as Canfield (1967); Cárdenas (1970, 1975); Sánchez (1972); Craddock (1973); Harris (1974); Hernández-Chávez, Cohen, and Beltramo (1975); and Pfaff (1979).

Since the 1970s, research programs on United States Spanish have been forthcoming. Some influential works include Ornstein-Galicia (1975); Amastae (1978); Peñalosa (1980); Hidalgo (1983, 1986, 1987, 1988); Elías-Olivares (1983, 1985); Ornstein-Galicia, Green, and Bixler-Márquez (1988); Bixler-Márquez, Ornstein-Galicia, and Green (1989); Roca (1993); Roca and Lipski (1993); Silva Corvalán (1990, 1994, 1995); Ramírez (1992); Roca and Lipski (1993); Roca (1993); and Parodi (2003, 2004, 2009).

It is challenging to characterize the vast array of linguistic studies about United States Spanish. In an attempt to organize the many converging and conflicting lines of research outlining this linguistic variety, this chapter broadly terms studies on United States Spanish as either sociolinguistic studies or linguistic studies. Sociolinguistic studies are then organized as follows: language variety research (dialectology), language contact research, and language use research. Linguistic studies are divided into descriptive or laboratory-based research.

2. Sociolinguistic Studies about United States Spanish

2.1 Language Variety Research

Language variety research programs are concerned with what is sometimes termed as *dialectology*. Two overarching questions are addressed in language variety research: First, what is the role of Spanish in the community? And, secondly, how similar or different is the Spanish of the community under investigation from that of other communities? Scholars such as Lipski (2008), Lantolf (1980), Ramírez (1992), Sánchez (1972, 1982, 1983), and others have contributed to this research program.

Most scholars who conduct this branch of sociolinguistic research either investigate the role of the language in the community **or** describe the dialect. Sánchez (1972), for example, focuses on a description of specific linguistic phenomena while her later work (1983) addresses broader questions pertaining to language interaction and its place amongst those who use it. However, Sánchez (1982) seeks to address issues of language valorization in the community as well as to describe the dialect under investigation.

Sánchez proposes a linguistic continuum by which Chicanos/as can be organized: "Spanish monolinguals, English monolinguals, and bilingual persons" (1982, p. 12). According to the author, "the bilingual group is the most widespread and the most complex because individuals exhibit various levels of language proficiency in the two languages and various patterns of language choice according to function and domain" (Sánchez, 1982, p. 9). In the linguistic continuum described by Sánchez, "a Chicano Spanish speaker can fall at one or more points along this continuum" (1982, p. 14). Also, according to the author, whether a community or speaker acquires a "standard" or "popular" variety produces differences in language use (Sánchez, 1982, p. 16). Speakers who learn the standard also learn the difference between

"formal" and "informal" [1] registers while those who learn non-standard Spanish are not as proficient at using these registers (Sánchez, 1982, p. 16). Non-standard Spanish speakers use "urban[2]" or "rural[3]" varieties (Sánchez, 1982, p. 16). These divisions, "standard", "non-standard", "rural", and "urban" index the lack of homogeneity within the Spanish-speaking Chicano community.

Sánchez also organizes levels of bilingualism according to categories originally presented by Lewis (1972). In his 1972 work, Lewis provides the following levels: *stable*, *dynamic*, *transitional*, and *vestigial*. According to Sánchez, *stable bilingualism* describes the linguistic situation of the Mexican-American border, where Spanish and English maintain all of their functions on either side of the border. *Dynamic bilinguals* are faced with the fact that there are overlapping language functions. This type of bilingualism describes the majority of U.S. bilinguals, especially first generation Chicanos/as. *Transitional* and *vestigial* bilingualism are described as the last two steps towards monolingualism, where language loss is at a "more advanced stage in which one language completely appropriates some of the functions of the other, displacing it little by little" (Sánchez, 1982, p.12). Finally, Sánchez reports, "only vestiges are left of the other, as evidenced in some expressions or terms reminiscent of another time and culture" (1982, p.12).

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[1] Below are some examples:
Formal: *¿fuiste al cine*? (Did you go to the movies?)
Informal: *'stá bueno* ("It is good", initial phonological material deleted) (Sánchez, 1982, p. 16).

[2] Urban varieties of non-standard Spanish are characterized by sentences such as "¿Qué hicistes ayer?" (What did you do yesterday?) and "¿Adónde fuistes?" (Where did you go?) instead of the standard "¿Qué hiciste ayer?" and "¿Adónde fuiste?" (Sánchez, 1982, p. 16).

[3] Rural varieties of popular Spanish are characterized by statements such as "¿Qué hicites ayer?" (What did you do yesterday?) and "¿Adónde fuites? " (Where did you go?) instead of the standard "¿Qué hiciste ayer?" and "¿Adónde fuiste?" (Sánchez, 1982, p. 16).

The second half of Sánchez' 1982 article demonstrates how Southwest Spanish is analogous and different to other Spanish varieties. The author concludes that Southwest Spanish can be generally described as "non-standard and urban" (Sánchez, 1982, p.12). Below, Table 2.1 and Table 2.2 organize and summarize the vocalic and consonantal phenomena explored in her article. The data has been transcribed using the International Phonetic Alphabet (IPA) for uniformity[4].

Observation/ phenomena	**Example/ orthography**	**Phonetic realization**
Unstressed mid vowels become high vowels	entender (to understand)	[entenˈder] → [intenˈder]
Apocope	para (for/to)	[ˈpara] → [pa]
Prothesis	tocar (touch)	[toˈkar] → [atoˈkar]
Contraction of homologous vowels	creer (to believe)	[kreˈer] → [ˈkrer]
Syncope	desapareciendo (dissapearing)	[desapareˈsjendo] → [despareˈsjendo]
Epenthesis	creo (I believe)	[ˈkreo] → [ˈkreyo]
Laxing of unstressed vowels	le (him/her)	[le] → [lə]
Metathesis (and other processes)	ciudad (city)	[sjuˈðað] → [sujˈðað] ~ [sujˈða] ~ [sujˈðaˠ]

Table 2.1 Chicano Spanish vocalic phenomena presented in Sánchez (1982).

[4] Most descriptions of Spanish report that the sound represented by <j> and <g> in the orthography is [x]. Mexican Spanish is know for having a softer, less velarized version of this sound, represented as [x^h] in this dissertation.

Observation/ phenomena	**Example/ orthography**	**Phonetic realization**
Aspiration of /s/ in any position	nosotros (we)	[noˈsotɾos] → [noˈhotɾos]
Aspiration of /f/	fuimos (we went)	[ˈfujmos] → [ˈhujmos]
Aspiration of orthographic <h>	huyó (he/she/it fled)	[uˈjo] → [huˈjo]
Loss of voiced fricatives	lado (side)	[ˈlaðo] → [ˈlao] ~ [ˈlaðo]
Interchangeable [β] and [ɣ]	aguja (needle) abuelo (grandfather)	[aˈɣuxʰa] → [aˈβuxʰa] ~ [aˈɣuxʰa] [aˈβwelo] → [aˈɣwelo] ~ [aˈβwelo]
Simplification of consonant clusters	doctor (doctor)	[dokˈtoɾ] → [doˈtoɾ]
Metathesis	pared (wall)	[paˈɾed] → [paˈðeɾ]
Epenthetic consonants	lamer (to lick)	[laˈmeɾ] → [lamˈbeɾ]
Lateralization	advierto (I warn)	[adˈbjeɾto] → [alˈbjeɾto]
Stress changes	mendigo (beggar)	[menˈdiɣo] → [ˈmendiɣo]
Alveopalatal fricative instead of the affricate	noche (night)	[ˈnotʃe] → [ˈnoʃe]
Interference of English, use of English /r/	pared (wall)	[paˈɾed] → [paˈɹed]

Table 2.2 Chicano Spanish consonantal phenomena presented in Sánchez (1982).

Unlike most scholars who conduct language variety investigations, Sánchez accurately points out that features that have been traditionally named features of Chicano Spanish "can be found in popular varieties throughout the Spanish-speaking world" (1982, p. 13). This observation gives great validity to her research and sets her apart from most other Chicano Spanish scholars, who fail to recognize this fact.

2.2 Language Contact Research

Most language contact research analyses codeswitching, defined uniquely in each study. Codeswitching research is concerned with describing the phenomenon itself or attempts to specify its rule system. It is difficult to find one author who both defines the phenomenon **and** describes its rule system. Thus, this section will first present work by Reyes (1982), who concerns himself with defining codeswitching. Then, this section will present the research completed by Poplack (1982), who is primarily interested in the principles constraining codeswitching. Lastly, this section will conclude with a unique and innovative line of research on dialect-contact proposed by Parodi (2003, 2004, 2009), whose research focuses on dialect contact.

Inspired by the research tradition started by Weinreich (1953) and Gumperz (1967), Reyes has written on codeswitching extensively. Reyes (1982) presents the conditions for language maintenance and language loss in the United States in two ways. First, Reyes explores terminology to describe the data. Secondly, the author dismisses associating Chicano Spanish with *interference* and argues for using the term *language mixing* instead (Reyes, 1982, p.155).

Reyes terms codeswitching as *language mixing*, defined as "the alternate use in discourse of Spanish and English, in which the alternating segments have their own internal structures and

do not depend on the rest of the discourse for their analysis" (1982, p. 163). The author breaks down language mixing into three categories: Type A, which is used when a speaker is quoting an event or another speaker[5]. Type B makes use of language X but uses language Y to be interpreted[6]. Lastly, Type C language mixing is defined by using a borrowed word that has been assimilated into Spanish[7].

Poplack incorporates both "linguistic and extralinguistic factors into a single analytical model to account for code-switching performance" (1982, p. 258). Although she focuses on the Spanish-speaking youth of New York (mostly of Puerto Rican descent), her methodology can be applied to studies on Spanish-speaking Angelenos.

Poplack categorizes codeswitching into two distinct configurations: *intimate codeswitching* and *less intimate codeswitching* (1982, p. 233). Intimate codeswitching occurs when there is a high number of intrasentential switching while less intimate codeswitching occurs when there are tags[8] and single noun switches. "He was sitting down *en la cama*, *mirándonos peleando y*[9] really, I don't remember *si él nos separó*[10]" exemplifies intimate

[5] For example, "*Cuando yo la conocí* (when I met her) she said, 'Oh, this ring, I paid so much,' *y que todo lo que compran tienen que presumir* (and that everything that they buy they have to brag about)" (Reyes, 1982, p. 154).

[6] For example, "*Yo quería que nosotros hicieramos* (I wanted for us to do) improve" (Reyes, 1982, p. 156).

[7] For example, the verbs *taipear* (to type), *mapear* (to mop), *chitear* (to cheat), *cuitear* (to quit), and *chansear* (to take a chance) (Reyes, 1982, p. 159).

[8] Tags are freely moveable constituents that can be inserted almost anywhere without violating grammatical rules.

[9] The translation is: "on the bed, looking at us, fighting, and"

[10] The translation is: "if he separated us."

codeswitching and the statement "*Salían en sus carros y en sus*[11] snowmobiles" exemplifies less intimate codeswitching (Poplack, 1982, p. 237).

Poplack's (1982) main contribution to the subfield of language contact research is not to define codeswicthing but, rather, to explain its systematicity. Her strategy is to include fluent and nonfluent bilinguals. By including nonfluent bilinguals, Poplack wishes to dismiss the idea that codeswitching is controlled by ability in the second language (L2). The author hypothesizes three possibilities: Speakers can engage in intimate codeswitching at the risk of making mistakes. Speakers can engane in both intimate and less intimate codeswitching. Or, speakers can avoid intrasentential switching that may be risky. Poplack's study found that ingroup membership triggers intrasentential switching or intimate codeswitching while non-group membership is characterized by less intimate switching. She also found that "there were virtually no instances of ungrammatical combinations of L1 and L2 in the 1,835 switches studied, regardless of the bilingual ability of the speaker" (Poplack, 1982, p. 247). Poplack's research proves that the rule-governed nature of codeswitching is upheld by even the nonfluent speaker. She concludes that codeswitching, "rather than representing deviant behavior, is actually a suggestive indicator of degree of bilingual competence" (Poplack, 1982, p. 231).

Parodi's research on Los Angeles Spanish is concerned with how dialect contact creates in a new variety. Parodi (2003) presents a case of dialect contact leading to language change by focusing on dialect contact between Mexican-Americans and Salvadoran-Americans living in Los Angeles. Although the Spanish that Salvadoran-Americans and Mexican-Americans have access to at home is dissimilar, their production outside the home is the same. Once in Los Angeles, a process of accommodation levels the Spanish of Salvadorans and Mexicans into a

[11] In English, this means "they would go out in their cars and in their"

variety that can be acquired or imitated regardless of country of origin, an adapted Mexican Spanish from the "rural tierras altas[12]" (mostly from the rural towns of the states of Guanajuato, Jalisco and Michoacán). According to Parodi (2003), non-homogeneity across adult speakers is not counterevidence to her conclusions since the linguistic process at hand for adults is one of accommodation. For children who learn Los Angeles Spanish before the critical period, however, the process is one of dialect acquisition.

Parodi (2004) suggests that there is a critical period of acquisition for dialect learning. Adopting and adapting ideas first presented by Labov (1972), this article points to two very important subdivisions of dialect consciousness, realized as the use and valuing of *stereotypes* and *indicators*. Stereotypes pertain to linguistic information that is recognized and judged positively or negatively, such as lexicon. The second level of dialect consciousness, the indicators, has to do with linguistic factors that speakers can't identify but that can be formally described and predicted by linguists, such as /n/ realized as [ŋ] word-finally in Salvadoran Spanish and as [n] in Mexican Spanish. For speakers who were born in Los Angeles or who arrived to Los Angeles before the critical period, Parodi's investigation found that both the stereotypes and the indicators had been learned and could be manipulated at will. On the other hand, speakers who had come in contact with Los Angeles Spanish after puberty only found stereotypes to be useful linguistic resources. In this way, to the extent that non-Mexican heritage speakers felt the need to adapt to Chicano speech, Parodi (2004) makes a compelling case for the existence of this variety.

[12] That is, the rural highlands.

Parodi's 2009 research on Chicano Spanish lists features that define the Spanish vernacular of Los Angeles, which she terms a *koiné urbano-rural*[13]. According to the author, the most important features of the Spanish vernacular of Los Angeles can be summarized as follows: First, speakers of the dialect stigmatize regional markers such as using non-Mexican words. For example, the use of *ayote* instead of *calabaza* (squash) and *guagua* instead of *camión* (bus). And, speakers of the dialect tolerate non-Mexican phonology such as the aspiration of /s/, the velarization of word-final /n/, and the elision of intervocalic /d/. Second, Chicano speakers readily produce forms such as *mesmo* and *haiga*[14], both of which are used but are highly marginalized in Latin America and Spain. Third, semantic extensions occur in the dialect, where words such as *soportar* and *colegio* are used to mean "support" and "college" instead of the Latin American or Peninsular Spanish *apoyar* and *universidad*. Lastly, the Chicano variety uses phonologically adapted borrowings such as *yarda* (yard/garden) and *marqueta* (market), which displace the Spanish *jardín* and *mercado* commonly.

Parodi (2009) also schematizes how it is that non-Mexicans learn and use the local dialect instead of using their own "koiné". For these speakers, Chicano Spanish is a real, dynamic variety that is worthy of being learned and used; Chicano Spanish is a variety that is central to survival and mobility within the local Angeleno community. Through a diglossia model, summarized in Table 2.3 below, Parodi presents a mechanism by which the linguistic panorama of Los Angeles can be recapitulated. Below, (A) marks the dialects that are highly esteemed socially and (B) denotes those that are less prestigious in the bilingual community of Los Angeles.

[13] That is, a common language with urban and rural features.

[14] The standard forms of these words are *mismo* (same, self) and *haya* (subjunctive form of *haber*, to have).

SPANISH among the working class	**SPANISH among the middle and upper class**
Chicano Spanish (A)	Standard Mexican Spanish (A)
↓	↓
Non-Mexican Spanish (B)	Chicano Spanish (B)
ENGLISH in the USA	**ENGLISH in Los Angeles**
Mainstream English (A)	Mainstream English (A)
↓	↓
Any variety of Spanish (B)	Chicano English (B)

Table 2.3 Diglossia model presented in Parodi (2009).

2.3 Language Use Research

Language use research follows the tradition pioneered by Fishman (1966). Scholars such as Hill (1993a, 1993b, 1995), Zentella (2003), and Hidalgo (1983, 1986, 1987, 1988) will serve to exemplify this broad category. Each scholar has taken on unique research questions. For example, Hill writes about the use of Spanish by non-Spanish speakers, Zentella explores language use both by Spanish speakers and by non-Spanish speakers alike, and Hidalgo focuses primarily on heritage speakers' use of Spanish.

Hill's work in relation to Spanish use in the United States is best summarized by her term *mock Spanish* (1995). According to the author, mock Spanish is the use of Spanish language words and phrases such as *mañana*, *adios*, and *macho man*[15], and the invention of words meant to sound like Spanish such as *el cheap-o* and *correctomundo* by non-Spanish speakers to racialize Spanish speakers (Hill, 1995, p. 682-683). For example mock Spanish is used by Schwarzenegger's Terminator as he says "Hasta la vista, baby" before blasting a victim (Hill, 1995, p. 683). According to Hill, in order to make sense of mock Spanish, interlocutors require

[15] These words mean the following: tomorrow, good-bye, and macho man.

access to "highly negative racializing representations of Chicanos and Latinos" (Hill, 1995, p. 680).

Zentella explores the way Latinos are portrayed as "an undifferentiated and uncomplicated but huge and threatening mass" in every day speech (Zentella, 2003, p. 52). The author looks at how "forms of speech and evaluations of language succeed in constructing whiteness, with standard English as its voice box, as the unmarked, normal, and natural order in the United States" (Zentella, 2003, p. 51). Like Hill, Zentella specifically explores a linguistic process created and used by non-Spanish speakers to mark Spanish speakers, termed *chiquita-fication* (Zentella, 2003, p. 52). This linguistic process applies a rule by which an English word is added the suffix [–a] or [–o] to turn it into a Spanish word. By doing so, the implication is that "anyone, including terminators and machines, can master Spanish with little effort" (Zentella, 2003, p. 52). Her analysis is that "Latinos are visibly constrained by rigid norms of linguistic purity [while] white linguistic disorder goes unchallenged" (Zentella, 2003, p. 53).

Zentella uses these findings to address larger social issues involving Latinos in the United States. First, she explains that the reality of racialized people, though very rich linguistically, results in silencing as they are "monitored" by their environment (Zentella, 2003, p. 51). Even in in-group activities, codeswitching may be perceived negatively. The second argument that she makes is that U.S. Latinos do more than codeswitch as they "make use of time-honored bilingual strategies like calquing[16] (Zentella, 2003, p. 59). Bilinguals can use *librería* (bookstore) to mean *biblioteca* (library), for example. Lastly, Zentella argues that Spanglish is the most common of all in-group linguistic techniques used among bilinguals, where the "alternation of several

[16] *Calquing*, defined by Zentella, occurs when a word in one language takes on the meaning of a word in the other language, especially when the words look and/or sound similar (2003, p. 59).

dialects of Spanish and English challenges the notion of bounded languages and identities" (Zentella, 2003, p. 59).

Hidalgo (1983), whose work on language maintenance and language pedagogy is impressive, is the last author included under language contact research. Hidalgo's 1983 manuscript is a sociolinguistic study exploring topics of "language maintenance, loyalty, and shift" (p. 47). In this investigation, Hidalgo mainly finds that the border is "a unique setting in which the values and functions of Spanish have not been dislocated but have only been minimized" (1983, p. 65-66). On the Mexican side of the border, English serves people well, particularly in business settings. On the U.S. side of the border, Spanish is regarded as "practical" and "real", which affects its speakers both positively and negatively (Hidalgo, 1983, p. 65-66).

Many other scholars have dedicated their life's work to sociolinguistic research. In addition, many other categories could have been presented in order to organize this subfield accurately. It is hoped, however, that this brief presentation serves to provide an accurate picture of the status of sociolinguistic research about United States Spanish.

3. Linguistic Studies on United States Spanish

3.1 Descriptive Linguistic Research

The first published comprehensive descriptive work about Los Angeles Spanish was Phillips' 1967 dissertation[17], which is an ambitious description of the Spanish spoken in Los Angeles[18].

[17] Another published work that describes this dialect is: Phillips, R. (1982). Influences of English on /b/ in Los Angeles Spanish. *Spanish in the United States: Sociolinguistic Aspects*, 71-81.

Unique to the Spanish of his Los Angeles informants are the use of aspirated stops, [v] as the more common allophone of /b/, an allophone of /d/ that is weaker than the traditionally described [ð], a velarized /l/, /s/ with allophones [s], [z], [h], and [ø], and "the English retroflex vocoid" (Phillips, 1967, p. 101). Phillips does not give a formal distribution for these allophones, however.

According to Phillips (1967), each vowel has at least the following allophones: mid, closed, open. He does not, however, mention if these observations are impressionistic or real, nor does he provide distributions for each of these variants.

Phillips includes a basic phonology discussion, encompassing topics that are general to all Spanish varieties such as metathesis, change of stress[19], and the omission of vowels[20] (Phillips, 1967, p. 164-177). The author also reports English-like vowels, such as the fronted [æ] (Phillips, 1967, p. 177).

Although Phillips' work is significant as it is the first of its kind, it is also problematic. The majority of Phillips' observations about Los Angeles Spanish apply to the Spanish language in general. Unlike Sánchez (1982), Parodi (2003), Lipski (2008), and others, Phillips fails to recognize the universal nature of his speakers' phonology. This is unfortunate because many of the observations that the author presents as innovations are general phonological processes of the Spanish language. For example, the author presents outputs that are not faithful for the phonemes

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[18] The first volume includes phonetic observations, a section on phonology, and a section of morphology. The second volume explores syntax, bilingual phenomena such as loan words and codeswitching, lexicon, and concludes with appendices and a bibliography.

[19] For example, this is found in the word *raíz* (root), pronounced as [ˈrajs] instead of [raˈis].

[20] For example, this is found in words such as *trocas* (trucks), pronounced as [ˈtroks] instead of [ˈtrokas].

/b/, /d/, /l/, /s/ and /r/, as if they were specific to Los Angeles Spanish when, in fact, many allophones are expected for these phonemes in all varieties of Spanish. In addition, Phillips' data are problematic as the participants of his study are from "different peer groups"[21] (1967, p. 15). Phillips interviewed each informant three times, using two formats: a question-answer session as well as spontaneous conversation. How the data was recorded, analyzed or coded is not mentioned. Lastly, the underlying phonetic inventory proposed by Phillips is sometimes unconventional. For example, when Phillips describes [j], he describes it as variation of the phoneme /ʤ/ (Phillips, 1967, p. 1979). Since /ʤ/ is not traditionally presented as a phoneme in the Spanish language, Phillips should have been more expounding in his presentation of the phonetic system[22].

Other authors have written about Mexican American Spanish, but, since Phillips' 1967 dissertation, no other comprehensive look at Los Angeles Spanish has been published. Lipski's 2008 publication, written to describe the distinguishing characteristics of the major varieties of United States Spanish, discusses historical, demographic, and linguistic information relating to Spanish of Mexican descent in the United States[23].

Lipski (2008) first gives a brief overview of Mexican American Spanish phonetics and

[21] His data is that of informants that vary on the following dimensions: gender, amount of Spanish spoken, and social rank. The last two dimensions (amount of Spanish spoken and social rank) are especially problematic because linguistic communities are often defined in the literature precisely by these two traits.

[22] Other such examples include: The velar voiceless fricative is presented as /x/ without any explanation, which is puzzling since a true velar fricative is seldom attributed to non-Peninsular varieties. His discussion of the nasals is also problematic. The allophones reported are [n], [m], [ɲ], [ŋ], as can be expected. However, his analysis assumes that [ŋ] and [m] are allophones of /ɲ/ instead of /n/, which is peculiar.

[23] This publication also explores Cuban, Puerto Rican, Dominican, Central American, and other varieties of Spanish as well as topics such as language mixing and codeswitching.

phonology, observing that it is similar to Mexican Spanish. Specifically, he addresses phonological processes involving the phoneme /s/, word-final /n/, the trill /r/, the vowel /e/, intervocalic /j/, vowels in contact with [s], syllable-final [ɾ], the fricative /x/, and the pronunciation of the affricate /tʃ/ (Lipski, 2008, p. 85-86). He also includes morphological, syntactic, and lexical characteristics of the variety. The remaining topics relating to Mexican-based United States Spanish involve Mexican American lexicon and a brief exploration of scholarship on Mexican American Spanish. In response to lines of research that describe Mexican American and United States Spanish as the Spanish of "individuals who think in English while speaking Spanish", Lipski asserts, "In reality, Mexican American Spanish is not a discrete dialect, but a continuum of language contact varieties encompassing a wide range of abilities in English and Spanish" (Lipski, 2008, p. 85). This has been asserted by Sánchez (1982) and other authors but will be contested in this dissertation (see Chapters 6 and 7).

Laboratory-based research about American varieties of Spanish, including Los Angeles Spanish, is non-existent. Investigations about Spanish conducted in the United States that have emerged from laboratory-based methodologies have studied the Spanish of non-bilinguals or have centered their queries around language acquisition. Nevertheless, given the methodology and goals of this dissertation, laboratory based linguistic research in relation to Spanish will be briefly explored.

3.2 Laboratory-based Linguistic Research

Although the trajectory of linguistic research in the United States has often preferred studies that focus on a narrow set of linguistic inquiries, a fact that may be frustrating to research programs aimed at understanding dialects broadly, linguistic studies about Spanish conducted in

the United States can be applauded for many reasons. First, research programs conducted in the United States about the Spanish language include intonational studies, a fact little seen in other research traditions. Secondly, most laboratory-based linguistic investigations are expository and transparent in their methodology.

Two noticeable problems arise when these studies are consulted, however. First of all, most studies on Spanish conducted in the United States pay little attention to dialectological differences between speakers. There are over twenty-one Spanish-speaking countries in the world. All Spanish-speaking countries are characterized by socioeconomic and class divisions that are largely embodied in language use. Second of all, many linguistic studies based on laboratory findings emerge from data gathered from only a few speakers, making broad generalizations difficult. Nevertheless, a brief exploration of some laboratory based investigations will be helpful in our characterization this subfield of linguistic research.

To exemplify intonational lines of research, the work by Lleó, Rakow, and Kehoe (2004), investigating the acquisition of basic intonational patterns by monolingual and bilingual children, will be explored. In their publication, a comparison was made between monolingual Spanish and German children, on the one hand, and Spanish-German bilinguals, on the other hand. The authors looked at the acquisition of prenuclear accents in broad-focus declarative utterances in children. Their investigation concluded that monolingual children seem to show no difficulty in acquiring the correct intonational pattern at an early age. The acquisition of these patterns in the bilingual children is subject-dependent, however. According to their findings, one of the bilingual children differentiated the patterns of the two languages, while the other used a variety of patterns in either language. Based on these observations, Lleó et al. (2004) argue that the acquisition of intonational patterns is analogous to the acquisition of other prosodic features. In

addition, the article finds that unmarked patterns of intonation (H*L) seem to develop earlier than marked patterns (L*H).

Prieto has conductive research on intonation. For example, Prieto (2004) studies sentence initial peaks as a function of sentence type. She compares the tonal scaling and alignment of five types of sentences in peninsular Spanish: statements, yes-no questions, wh-questions, imperatives and exclamatives. The main theoretical assumption in this paper is that pitch range also conveys linguistic information, in particular, information about sentence type. Specifically, the scaling of initial tones is consistently higher in questions than in statements. Similarly, imperatives and exclamatives show consistently higher initial tones than the other sentence types. In terms of tonal alignment, the results show a clear distinction between late H1 peaks for statements and questions, and early H1 peaks for imperatives and exclamatives. Prieto proposes that extra features such as "delayed peak" and "raised peak" are needed to refine both tonal scaling and alignment.

Phonological studies are more representative of laboratory-based linguistic research than intonational studies. For example, Díaz-Campos (2004) looked at the acquisition of sociolinguistic variables by Venezuelan children. He investigated whether children of different age groups have acquired the stylistic and sociolinguistic variation known as intervocalic /d/ deletion in Venezuelan Spanish. One of the goals of the study was to test whether the acquisition of variation is done on a case-by-case basis or, more generally, by rule. The outcome of the experiments showed that the factors having to do with frequency (dictionary or corpus) play a crucial role in predicting the pronunciation of intervocalic /d/, whereas age does not seem to be a significant factor. According to the author, this supports the hypothesis that variation is not acquired by rule, but on a case-by-case basis.

Ortega-Llebaria (2004) found evidence of the theoretical assumption that a particular phonological inventory imposes constraints on the phonetic realization of specific vowels and consonants. Ortega-Llebaria compared the degree of lenition in intervocalic /b/ and /g/ in Spanish and English. Since English distinguishes phonologically between /b/ and /v/ while Spanish has only /b/, it is hypothesized that Spanish will allow for more variability, more lenition in this case, in the production of /b/ than English. On the other hand, since neither language contrasts [g] with [v], both /g/ and /b/ should exhibit similar degrees of lenition. The results of the acoustic study showed that, indeed, Spanish /b/ exhibits more lenition than English /b/, while /g/ shows more similar degrees of lenition in both languages.

4. Conclusion

Sociolinguistic studies on United States Spanish, which began with Espinosa at the beginning of the twentieth century, have enjoyed a long history and faithful following. Therefore, United States Spanish sociolinguistics has enjoyed research on a multitude of topics, including language variety (dialectology), language contact, and language use. On the other hand, laboratory-based studies about United States Spanish and, especially, about Los Angeles Spanish, are non-existent. This attests to the importance of the present investigation. However, before we can describe Los Angeles Chicano Spanish, the present dissertation must first pause to describe the Mexican Spanish baseline, to which we now turn.

Chapter 3

MEXICAN SPANISH

1. Introduction

Chicano Spanish cannot be studied or understood without a thorough consideration of Mexican Spanish. Investigations about United States Spanish that fail to recognize the profound influence that Mexican Spanish has had on Chicano Spanish are prone to misrepresent what is innovative about Chicano Spanish.

With a population of over 113 million and an area that spreads over 1,972,550 squared kilometers ("The world factbook", 2012), Mexico is a country that is rich in regional linguistic diversity. A vast array of projects about Mexican dialectology have been conducted for about a century by scholars such as Henríquez Ureña (starting in the 1930s), Lope Blanch (starting in the decade of the 1960s), Moreno de Alba (starting in the 1980s), and many others. In spite of this long tradition and as late as 1983, Lope Blanch warned that "hacen falta aún muchos estudios geolingüísticos para que se pueda llegar a una delimitación precisa de los dialectos mexicanos[24]" (1983, p. 88).

Since its inception, Mexican linguistic research has regarded regional differences as central to all explanatory models. For example, in 1938, Henríquez Ureña's primordeal contribution to the field was to propose five dialectal regions for Mexico: Northern Mexico, Central Mexico (including Mexico City), the Coastal areas of the east, the peninsula of Yucatán,

[24] This statement translates as: Many more geo-linguistic studies remain to be done in order to have a precise delimitation of Mexican dialects.

and the state of Chiapas. In 1977, Henríquez Ureña revised his dialectal regions from five to six, adding the Spanish-speaking United States territory to his previous classification.

Boyd-Bowman's 1960 investigation begins with a general discussion of Mexico's distinct linguistic areas, which he presents as the Valley of Mexico (the state of Mexico, the Federal District, and parts of the state of Hidalgo), the East (the highlands of Veracruz, Tlaxcala, and Puebla), the Bajío (Guanajuato, Querétaro, Michoacán, and part of Jalisco), the North (the Northern states, including San Luis Potosí and part of Hidalgo as well as sections of Zacatecas and Aguascalientes), and the West (Jalisco, Colima and Nayarit).

Manuel Alvar's 1996 book summarizes information on Mexican Spanish in light of Lope Blanch's (1972) ten dialectal areas, which are: Yucatán, Chiapas, Tabasco, coastal Veracruz, Oaxaca, Central Mexico (including Mexico City), the coastal areas of Oaxaca and Guerrero, Northeastern Mexico, Northwestern Mexico, and Northern Mexico.

Based on an exhaustive bibliographical study, this chapter first discusses the general features shared throughout Mexico that give Mexican Spanish its special flavor. The chapter then organizes Mexican dialectology into six geographical regions (Central Mexico, the Bajío and West Mexico, Northern Mexico, the Yucatán peninsula, The Gulf and the Lowlands, and the state of Chiapas). As an expository tool, the information presented for each geographical region is organized linguistically into four categories: obstruents, sonorants, vocalic phenomena, and sociolinguistic phenomena. The author anticipates that this chapter will be a useful tool for any investigator of Mexican and/or Chicano varieties of Spanish. The following map of Mexico is provided to help the reader locate the areas and states discussed in this chapter.

Figure 3.1 Map of Mexico.

2. General Features of Mexican Spanish

Henríquez Ureña (1977) and others point out that there are two conflicting phonological trends in Mexican Spanish: the precise pronunciation of all the consonants along with the weakening of stressless vowels in the highlands and the strong vocalic pronunciation combined with consonantal elision at the end of syllables in the coastal areas. This tug-of-war is the primordial characteristic that defines Mexican Spanish.

2.1 General Vocalic Features of Mexican Spanish

Phonological theory and dialectological research have traditionally asserted and evidenced that stressed vowels are much more stable than stressless vowels. In Mexican Spanish,

the five-tier vocalic system, which is represented by /a, e, i, o, u/, remains mostly unchanged for stressed vowels, regardless of the regional dialect (Navarro Tomás, 1944; Harris, 1969; Monroy Casas, 1980). In addition, stressed vowels are lengthened (Lope Blanch, 1987; García Fajardo, 1984)[25].

In opposition to this, Mexican Spanish has a full spectrum of possibilities when it comes to the realization of its unstressed vocalic system. Canfield asserts that, "vowel reduction in the unstressed syllable, following or preceding primary stress, is very common in highland Mexico, which means most of the nation" (1981, p. 62). Specifically, Central Mexico is characterized by open vowels, palatalization, and velarization in adequate contexts (before codas) while the West of Mexico, on the other hand, is very conservative in its treatment of unstressed vowels (maintaining their medial quality overwhelmingly) (Cárdenas, 1955[26]).

The unstable nature of vowels in hiatus in Mexican Spanish is one of its primordial distinctive features. There is great vacillation in the way hiatus is resolved. On the one hand, the quality of the non-stressed vowel is compromised so that words like *pelear* (to fight) [peleˈar] (three syllables) become [peˈljar] (two syllables). The opposite trend is also true. Mexican Spanish can turn a two-syllable word into a three-syllable word by changing the placement of the stress in words such as *deuda* (debt) [ˈdewda] (two syllables) which becomes [deˈuda] (three syllables) (Henríquez Ureña, 1977[27]).

[25] Lope Blanch, 1987, p. 34; García Fajardo, 1984, p. 29

[26] Cárdenas, 1955 p. 15

[27] Henríquez Ureña, 1977, p. 96

2.2 General Consonantal Features of Mexican Spanish

Mexican Spanish is conservative in its consonantal realization. Among Mexico's most distinctive features are the realization of the *grupos cultos*[28] (Lope Blanch, 1987), the strong nature of the phoneme /s/ (Henríquez Ureña, 1977), and its generalized *yeísmo*[29] (Alonso, 1961).

2.3 General Sociolinguistic Phenomena of Mexican Spanish

Two very important factors determine much of the sociolinguistic phenomena in Mexican Spanish. First, Native American languages have shaped the local dialects of Mexican Spanish as Mexico is still home to large indigenous populations (Malmberg, 1964; "The world factbook", 2012). Second, social stratification (which is correlated with educational attainment) determines many of the local idiosyncrasies found in the language.

2.3.1 The influence of Amerindian languages on Mexican Spanish

Lope Blanch (1972, 1979, 1983, 2005), who is cautious in attributing Spanish language linguistic phenomena to Native American language contact, finds that Náhuatl has indeed influenced Mexican Spanish. At the phonetic level, Lope Blanch discusses the prepalatal

[28] "Grupos cultos" refers to consonant clusters that "sit astride the syllable boundary" as in [b**.**s], [k**.**s], [k**.**t], [p**.**s], [t**.**n] in words such as *absoluto* (absolute), *éxito* (success), *cápsula* (capsule), and *étnico* (ethnic) (Whitley, 2002, p. 34). The name, which can be translated as *cultured groups*, refers to consonant clusters that are remnants of late Latin borrowings into Spanish.

[29] "Yeísmo" describes the use of the phoneme /j/ for the graphemes <ll> and <y>. Whereas some Spanish speaking countries use the palatal lateral [l^j] for orthographic <ll> and the palatal approximant [j] for the grapheme <y>, Mexican Spanish has neutralized this distinction, using the phone /j/ for both graphemes. The reader is asked to note that this phoneme is generally represented as /y/, not as IPA /j/, in the Hispanic linguistics tradition (the *hispanista* tradition).

voiceless fricative [ʃ][30], the voiceless dentoalveolar affricate [ts][31], and the consonant sequence <tl> (pronounced as IPA [tɬ]) (2005[32]). Since Náhuatl was widely spoken throughout Mexico as a lingua franca prior to 1519, [ʃ], [ts], and [tɬ] are felt to be common sounds to Mexicans in the context of Nahuatlisms, food, and topology. In Yucatán, the footprint of Maya has actually changed the phonetic inventory of the local dialect (Alvar, 1996). For example, implosive and plosive stops are used interchangeably in Yucatán, even in lexemes not derived from Maya (Alvar, 1996, p. 85-86).

2.3.2 The influence of social class in Mexican Spanish

Scholars, among them Quilis and Fernández (1969), explain sociolinguistic phenomena by making a distinction between *language* and *speech*[33]. By including social class and educational level as part of their explanatory model of linguistic heterogeneity, Quilis and Fernández, like Navarro Tomás (2004) and others, propose that the educated class of Mexico has more homogenous speech than the less educated class. In fact, Navarro Tomás asserts that, "la pronunciación popular, fuera del dominio de ciertos

[30] This is symbolized as [š] in his writtings.

[31] This is symbolized as [ŝ] in his writings and is represented orthographically as <*x*>.

[32] Lope Blanch, 2005, p.11-28

[33] Such scholars synthesize Saussure's ideas about language and speech, which are: "[l]a lengua es un modelo general y constante que existe en la conciencia de todos los miembros de una comunidad lingüística determinada… el habla es la realización concreta de la lengua en un momento y en un lugar determinados en cada uno de los miembros de una comunidad lingüística determinada" (*Language* is a general and constant model that exists in the consciousness of all the members of a given linguistic community... *speech* is the concrete idealization of the language at a specific moment and time, realized in each of the members of a given linguistic community) (Quilis & Fernández 1969, p. 3).

rasgos generales, es mucho menos uniforme que la pronunciación culta[34]" (2004, p. 8). Where significant, sociolinguistic phenomena characterizing Mexican Spanish will be discussed.

3. Regional dialects

Based on an extensive study of the literature published to date about Mexican Spanish, this chapter divides Mexico into six linguistic regions: Central Mexico, the Bajío and Western Mexico, Northern Mexico, The Yucatán peninsula, the Gulf of Mexico and the Lowlands, and the state of Chiapas.

3.1 Central Mexico

The area identified as Central Mexico for the purposes of this dissertation includes the Federal District (including Mexico City), the states of México, Morelos, Puebla, Tlaxcala, and parts of the state of Hidalgo, Guerrero and Oaxaca (see Figure 3.1 above to locate these states and areas). The most salient phonological features of this area are the weakening and deletion of vowels and a general maintenance of consonants. In the mouths of the educated class, the Central Mexico variety, particularly the variety spoken in Mexico City, is regarded as the national standard.

3.1.1 Obstruents

The early work of Matluck, written in 1951, is perhaps the most important document detailing the speech of this area. Prior publications such as Marden (1896) and subsequent works

[34] This statement translates as: The pronunciation of the working class, outside of the domain of certain general traits, is much less uniform than that of the educated class.

by Lope Blanch (1963, 1968, 1969, 1972, 1979, 1983) and Canfield (1981) concur with Matluck's 1951 pioneering observations.

Matluck (1951) first presents the distribution for the voiced stops /b, d, g/, a distribution that is expected and predictable for all Spanish dialects. In his description, the fricativized variants [β, ð, ɣ] are more common than the underlying stop variants. This distribution has been made by others such as Parodi (personal communication) and is synthesized in rule form in the following table:

/b/ → [b] / # __, [+nasal] ___
/b/ → [β], elsewhere
/d/ → [d] / # __, [l, n] ___
/d/ → [ø] / __ #, especially in very common words
/d/ → [ð], elsewhere
/g/ → [g] / # __, [+nasal] ___
/g/ → [ɣ], elsewhere

Table 3.1 Distribution of /b, d, g/ in Central Mexico. This is the expected distribution for all Spanish dialects.

Matluck's (1951) remaining observations about the voiced stops in Central Mexican Spanish are summarized in the following table:

/obs/ → [o] ~ [ou] ~ [oub] ~ [ok] ~ [ouk]

example: *obsesión* (obsession), [obseˈsjon] → [oukseˈsjon]

/b/ → [v], sometimes in the upper classes (ultracorrection due to orthography).

example: *verde* (green), [ˈberðe] → [ˈverðe]

/b/ → [g], sometimes.

example: *bueno* (good), [ˈbweno] → [ˈgweno]

/d/, is generally pronounced with a stronger articulation than in other varieties.

/d/, can be inserted due to ultracorrection.

example: *bacalao* (salted cod), [bakaˈlao] → [bakaˈlado]

/g/ → [j] / __ [i]

example: *seguir* (to follow/to continue), [seˈgiɾ] → [seˈjiɾ]

/gn/ → [n] ~ [nn]

example: *ignorante* (ignorant), [ignoˈɾante] → [innoˈɾante] ~ [inoˈɾante]

Table 3.2 Distribution of /b, d, g/ in Central Mexico.

The distribution of the voiceless stops is more faithful than that of the voiced stops in Central Mexican Spanish, except in cases of the *grupos cultos*[35]. For example, /kt/ may become

[35] See footnote 5.

[pt], [ut], or even [it] so that *perfecto* (perfect) is pronounced as [pɛrˈfepto], alternating with [pɛrˈfewto] and [pɛrˈfejto], instead of the expected [pɛrˈfekto] (Matluck, 1951[36]).

The fricatives of Central Mexico exhibit behavior that is representative of most of Mexico, Latin America, and Spain. For example, all fricatives have outputs that are faithful to their underlying form. However, /f/ and /s/ are notorious for having alternations in Central Mexican Spanish (Matluck, 1951). The most common alternative realizations of /f/ are summarized in the table below.

Orthographic <h> becomes [f] example: *huir* (to flee), [uˈir] → [fuˈir]
/f → [ɸ], in the cultured classes. example: *fuente* (fountain/source), [ˈfwente] → [ˈɸwente]
/f/ → [x^h] /__[w], in the popular classes. example: *afuera* 'outside', [aˈfwera] → [aˈ x^hwera]

Table 3.3 Distribution of /f/ in Central Mexico.

The realization of /s/ is a distinctive feature of the dialect. For example /s/ may be palatalized[37] (Lope Blanch, 1993). Other authors, including Canfield (1981) and Ávila (1973), confirm this observation.

[36] Matluck, 1951, p. 74

[37] Lope Blanch notes, "las articulaciones africadas de /s/ son relativamente abundantes en el habla... tanto de hombres como de mujeres de las más diversas edades y de muy distinta condición sociocultural[37]" (Affricated articulations of /s/ are relatively abundant in Mexican

/s/ → [+palatal] / __ [+palatal]	(Matluck, 1951, p. 74)
/s/ → [ʃ] / [n, l, r, #] __	(Lope Blanch, 1993, p. 193, pg. 197)
/s/ → [+palatal] / __ [l]	(Ávila, 1990, p. 93)

Table 3.4 Palatalization processes of /s/ in Central Mexico.

Voicing of /s/ is another process commonly appreciated in this area, particularly before the following sounds: [b, d, g, m, n, l] (Matluck, 1951[38]). This feature is also noted in other dialectal areas.

In Central Mexico, what is characterized as a velar fricative in Spain (symbolized as /x/) is a sound that is "menos áspero y menos tenso que en castellano en general pero más fuerte que en Andalucía[39]" (Matluck, 1951, p. 81). Thus, the combined symbol /x^h/ will be used in this dissertation to represent the Mexican sound more accurately.

3.1.2 Sonorants

For Central Mexico, interesting observations can be made about the sonorants /ɾ/ and /l/. The flap /ɾ/ is unstable in some lexemes, changing to [l] or [d] ~ [ð] as in the popular pronunciations of *árbitro* (referee), which becomes either [ˈalbitɾo] or [ˈaðbitɾo] instead of the

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speech... among men and women from all age groups and among people from different sociocultural status) (1993, p. 197).

[38] Matluck, 1951, p. 74

[39] This statement translates as: less harsh and tense than is generally seen in Castillian Spanish but stronger than in Andalucia.

standard [ˈarbitro][40] (Matluck, 1951[41]). An assibilated version of the flap in [tr] cluster[42] is also reported (Matluck, 1951[43]). Finally, palatalization of /l/ before [i] is found (Matluck, 1951, p. 87), represented here as [lʲ]. The following table provides examples of these realizations.

/ɾ/ → [l] ~ [d] ~ [ð]
árbitro (referee), becomes either [ˈalbitro] or [ˈaðbitro]
The standard form is [ˈarbitro]
[tɾ] → [tř] ~ [t̝]
traigo (I bring), becomes either [ˈtřaigo] or [ˈt̝aigo]
The standard form is [ˈtraigo]
/l/ → [lʲ] / __[+palatal]
lindo (pretty), becomes [ˈlʲindo] instead of [ˈlindo]

Table 3.5 Realization of /l/ and /ɾ/ in Central Mexico.

Matluck describes the /j/[44] of Central Mexico as stable, "bastante abierta y la estrechez entre el dorso y el paladar se acerca más al tipo redondeado español… nunca se hace rehilante…

[40] In some instances, among the elderly who are less educated, some archaic forms of Spanish emerge such as *párparo* and *melecina* instead of their modern Mexican Spanish pronunciations *párpado* (eyelid) and *medicina* (medicine) (Matluck, 1951, p. 87).

[41] Matluck, 1951, p. 87

[42] According to Matluck (1951), the version of the flap that is the most common is the voiceless sibilant, even amongst the educated class (p. 90). The reader is asked to refer to Chapter 4 for a more thorough description of the asibilated flap and trill.

[43] Matluck, 1951, p. 90

[44] Most of the literature uses the symbol /y/.

ni se suprime, ni se intercala en hiato de vocales[45]" (1951, p. 100). In opposition to Matluck (1951), Alonso (1961) reports cases of weakening of /j/ in Central Mexico[46] (1961). These contradicting observations probably point to the fact that there is vacillation between a stronger (consonantal) and a weaker (semiconsonantal) version of /j/ in the region[47].

Nasal consonants have many interesting outputs in this dialect such as deletion, insertion, permutation[48], which are summarized in the table below:

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[45] This statement translates as: "… very open and the space between the dorsal part of the tongue and the palate is rounded, like in Spanish … it is never fricativized … or supressed, and it is not added to break a hiatus."

[46] Alonso (1961, p. 352)

[47] The author found this to be the case in Querétaro and Morelos. Querétaro is usually regarded as part of the Bajío region, not central Mexico. However, Alonso presents this weakening as part of the Querétaro **and** Morelos region. Since Morelos is clearly part of Central México, this observation has been included here.

The insertion of [j] due to hypercorrection or due to phonologically driven contexts is not reported for Central Mexico as in other dialects, according to Matluck (1951, p. 100).

[48] Matluck, 1951, p. 106-112

/n/ → [n] ~ [ø] / __ [e] #

__ [i] #

example: *jardín* (garden), [xharˈdin] → [xharˈdĭn] ~ [xharˈdĭ].

/n/ → [ɲ] /__ [e] #

__ [i] #

example: *nieve* (snow), [njeβe] → [ɲjeβe]

Permutation of nasal (usually in the working class)

example: *estómago* (stomach), [esˈtomaɣo] → [esˈtoɣamo]

Insertion of nasal (usually in the working class)

example: *mucho* (much), [ˈmutʃo] → [ˈmuntʃo]

/m/ → [n] / __#

example: *album* (album), [ˈalbum] → [ˈalbun]

[ø] → [b] / [m] __

example: *lamer* (to lick), [laˈmeɾ] → [lamˈbeɾ]

/mn/ → [bn] ~ [nn] ~ [gn]

examples: *solemne* (solemn), [soˈlemne] → [soˈlebne]

himno (hymn), [ˈimno] → [ˈinno] ~ [ˈigno]

Table 3.6 Nasal phenomena in Central Mexico.

The articulation of the phoneme /ɲ/ is described as "menos mojada que la castellana y con menos tensión[49]" (Matluck, 1951, p. 111).

3.1.3 Vowels

The most salient feature of Central Mexico's Spanish is its *vocales caedizas* (falling vowels) (Lope Blanch, 1963). Vowels that appear at the beginning of a word and that are followed by [s] are often deleted in Central Mexico, lengthening the [s]. Also, a vowel whose coda is [s] is often weakened or deleted (Matluck, 1951[50]).

Matluck (1951) describes the phoneme /a/ as central[51]. He also reports palatalization (where the tongue is raised and fronted) and velarization (where the tongue is retracted) of /a/ in appropriate contexts (1951). Table 3.7 below summarizes these realizations[52].

/a/ → [+palatal] / __ [+palatal]
/a/ → [+velar] / __ [+velar]

Table 3.7 Realizations of /a/ in Central Mexico.

For Central Mexico, Matluck found that /e/ is produced as its open allophone [ɛ] after [ɾ], even in closed syllables. According to Navarro Tomás, [ɛ] is not supposed to occur in syllables closed by [m, n, s, d, z, x]. Table 3.8 presents these two competing observations.

[49] This statement translates as: less wet (less palatal) and with less tension.

[50] Matluck, 1951, p. 17

[51] Called *timbre medio* (medial tone).

[52] This is reported in Matluck (1951), p. 5. Marden (1896) and Navarro Tomás (2004) also make these observations for /a/.

/e/ → [ɛ] / [ɾ] ___ (Matluck, 1951)
/e/ → [e] / [ɾ] ___ [m, n, s, d, z, x] (Navarro Tomás, 2004)

Table 3.8 Realizations of /e/ in Central Mexico.

Unless /o/ is in contact with [r] or [ɾ] or has a consonantal coda, /o/ remains a mid vowel in Central Mexico. When in contact with the aforementioned phones, it can become an open mid vowel, the variant [ɔ] (Matluck, 1951)[53].

According to Navarro Tomás, the realization of stressed /i/ is highly regular, even in syllables with codas, except when in contact with /r/ or /ɾ/, in which case the sound becomes the variant [ɪ][54] (2004).

Navarro Tomás reports that the Valley of Mexico has the "normal Spanish" variant of the phoneme /u/ (2004, p.62). Matluck, on the other hand, reports that tensed [ʊ] is produced in "stressed syllables with [l] or [ɾ] as codas" (Matluck, 1951, p. 10).

The processes described above for /o, i, u/ in Central Mexico are summarized below in Table 3.9.

[53] This is reported in Matluck (1951) p. 8. This observation concurs with those found in Marden (1938) and Navarro Tomás (2004).

[54] This is reported in Navarro Tomás, 2004, p. 46. This is also reported by Matluck, 1951, p.10.

/o/ → [ɔ] / [ɾ] ___

/o/ → [ɔ] / [r] ___

/o/ → [ɔ] / ___ [ɾ]

/o/ → [ɔ] / ___ [+consonant]] $_{\text{syllable}}$

/i/ → [ɪ] / [ɾ] ___

/i/ → [ɪ] / ___ [ɾ]

/i/ → [ɪ] / [r] ___

/u/ → [ʊ] / ___ [l]

/u/ → [ʊ] / ___ [ɾ]

Table 3.9 Realization of the phonemes /o, i, u/ in Central Mexico.

Epenthetic consonants or semiconsonants occur in cases where a word begins with a semivowel. When this is the case, a closely related consonant can be inserted and can absorb the semivowel so that words such as *hielo* (ice), mostly pronounced as [ˈi̯elo] can become [ˈjʲelo] ~ [ˈjelo] (Matluck, 1951[55]).

3.1.4 Other Phenomena

Matluck reports that many interesting processes occur "entre la población india más inculta[56]" (Matluck, 1951, p. 13). According to Matluck, /o, u, e, i/ are less stable in the aforementioned population (Matluck, 1951). For example, *poco* (a bit), pronounced as [ˈpoko]

[55] Matluck, 1951, p. 33

[56] This means, in the less cultured indigenous population.

can become [ˈpoku], and *ministro* (minister) pronounced as [miˈnistro] can become [meˈnistro] (Matluck, 1951[57]). After a palatal, [e] can become [i] as in *nochebuena* (Christmas eve), pronounced as [notʃiˈβwena] instead of the standard [notʃeˈβwena] (Matluck, 1951[58]). In the less educated population, an epenthetic [a] is common so that words such as *figurarse* (to imagine), pronounced as [figuˈrarse] become [afiguˈrarse]. Monophthongization of diphthongs and diphthongization of monophthongs is reported also in popular speech, especially in rapid speech. *Aumentar* (augment) [awmenˈtar] can become [omenˈtar] and *diferencia* (difference) [difeˈrencja] can become [difeˈrjencja] (Matluck, 1951). Lastly, diphthongs can be metathesized, as in *ciudad* (city) [sjuˈðað], which becomes [swiˈðað] (Matluck, 1951[59]).

3.2 The Bajío Region and West Mexico

The Bajío region includes the state of Guanajuato and Querétaro; the West Mexico region is made up of the states of Michoacán, Colima, Nayarit, Aguascalientes, and Jalisco (see Figure 3.1 above to locate these states). These two regions (The Bajío and West Mexico) have been placed together as a dialectal area because the Spanish spoken in these two areas is very similar according to what has been published. This region is the Spanish baseline for Chicano Spanish since most Mexican immigration to Los Angeles in the twentieth century has been from this aera.

Three phenomena give this region its special flavor: A stronger than usual pronunciation of the obstruents, an unexpected nasalization of vowels and consonants, and an abundance of

[57] These examples are on page 18.

[58] These examples are from page 23.

[59] These examples are from pages 33 through 35.

sociolinguistic phenomena (Lope Blanch, 1979, 1993; Boyd-Bowman, 1960; Cárdenas, 1955, 1967).

3.2.1 Obstruents

According to Cárdenas (1967) and Boyd-Bowman (1960), this area maintains the underlying forms of the voiced obstruents, modifying their production only in expected ways (see table 3.1 above) [60].

The voiceless stops, /p, t, k/ are generally realized, as in all other dialects, as [p, t, k]. However, word-initial /p/ can become voiced and word final /t/ is sometimes not pronounced[61] (Boyd-Bowman, 1960). /k/ is slightly postpalatal when followed by [j] or [i]; Otherwise, /k/ is simply velar (Boyd-Bowman, 1960[62]).

In the Bajío, /f/ is realized as [f], alternating with [ɸ] before [i] or [e] (Boyd-Bowman, 1960). Cárdenas (1967) makes the opposite observation for Jalisco Spanish, however. Cárdenas points out that /f/ remains [f] before [i, e] and changes to [ɸ] when before [a, o, u]. This contradiction probably indicates that [ɸ] and [f] as allophones of /f/ are in free variation in this area.

[60] Table 3.1 summarizes the default realizations of the voiced obstruents in Spanish.

[61] Except in anglicisms, among the educated class. Words such as *el jit* (the hit) and *el nócaut* (the knock-out) generally maintain a word-final [t] in the educated class (Boyd-Bowman, 1960, pg. 59).

[62] These observations are taken fom Boyd-Bowman, 1960, pg. 59

Cárdenas (1967) and Boyd-Bowman (1960) describe /s/[63] extensively. As in Central Mexico, voicing occurs when /s/ is surrounded by sonorant sounds, like in the word *desde* (from, since), pronounced with a [z] instead of an [s]. In the Bajío, the /s/ can be voiced and palatalized when in contact with the semiconsonant /j/[64] in words such as *desyerbar* (to weed) (Boyd-Bowman, 1960). No cases of loss of word final /s/ are reported in this area. The nasalization of [s] at the end of a word, called "resonancia nasal[65]", will be discussed in detail below as it is marker of educational attainment. This realization is reported in Jalisco[66], particularly in the Los Altos area (Cárdenas, 1955, 1967[67]).

The velar fricative /x/ is realized as [h] in Jalisco, "no como la castellana sino abierta y suave como la *h* aspirada[68]" (Cárdenas, 1967, p. 36). In the Bajío and West Mexico, the voiceless palatal affricate /t∫/ is faithfully produced[69].

[63] Boyd-Bowman's description of Guanajuato Spanish /s/ is: coronal, flat, dento-alveolar, and fricative. In some cases, it is convexed, predorso-dentoalveolar, and particularly long (1983, p. 70). Jalisco's [s] is described it as predorsal and convexed, according to Cárdenas (1967, p. 44).

[64] Boyd-Bowman uses the symbol [ǰ] for IPA /j/, probably alluding to a stronger, consonantal realization (p. 71).

[65] This translates as "nasal resonnance".

[66] I have heard this in other areas such as Aguascalientes and Zacatecas, however.

[67] Also, see Henríquez Ureña, 1938, p. 28.

[68] This translates as: Not like the Castilian one but rather open and soft like the aspirated *h*.

[69] No instances of /t∫/ → [∫] were reported (this realization is common in other areas such as Northern Mexico).

3.2.1 Sonorants

/j/ in this region is very stable[70]. Epenthetic /j/ in this area is not common[71] (Boyd-Bowman, 1960).

Many pecularities are noted in relation to /ɾ/ and /r/, including an assibilated version, represented as [r̝][72] in this dissertation. A summary of what is reported in relation to /ɾ/ for the dialect is provided in the following table:

/ɾ/→[r̝], sometimes
/ɾ/→[r̝] / __#, very commonly
/ɾ/→[ø], in Guanajuato
/ɾ/→[ø], before the affixes –me, –te, –se, –le and –lo, in Jalisco

Table 3.10 Realizations of /ɾ/ in West Mexico and the Bajío region.

In all dialects of the Spanish language, nasals adapt to adjacent consonants. In West Mexico and the Bajío, nasals are coarticulated aggressively so that they become highly velarized before a velar consonant and very palatalized before high vowels, producing [ˈɲudo] instead of [ˈnudo] (*nudo*, knot) and [ˈɲjeto] instead of [ˈnieto] (*nieto*, grandson) (Boyd-Bowman, 1960[73]).

[70] According to Cárdenas (1967), the affricated version of this sound is very infrequent and *rehilamiento* (weakening) is also not very common in the region.

[71] Except for common words in Guanajuato such as *cae* (he/she/it falls), pronounced as [ˈkaje] instead of [ˈkae] (Boyd-Bowman, 1960, p. 82).

[72] Interestingly, Robe (1949) attributes the pronunciation of [ɾ] as [r̝] to women. The reader is asked to consult section 3.2 of chapter 3 for more information on this sound.

[73] These data are on p. 53, p. 87.

Nasals are deleted when in contact with [s] or when they appear in consonant clusters[74] (Cárdenas, 1967[75]). The insertion of nasals will be discussed later as it is a sociolinguistic factor.

3.2.2 Vowels

The vowels in this region are realized fully and faithfully most of the time. The phoneme /a/ is described as a low central vowel that can become palatalized or velarized when adjacent to a palatal or velar consonant. The front mid vowel /e/ in stressed syllables is stable for Jalisco speakers (Cárdenas, 1967[76]). The Bajío has a less stable stressed /e/ as it can become tensed (closed) if it is adjacent to a palatal and lax (open) before [ɾ] and [l] (Boyd-Bowman, 1960[77]). In the Bajío region, /o/ is realized as a central, rounded vowel that becomes open if the coda is [x^h], [r] or [ɾ] (Boyd-Bowman, 1960[78]). The same phenomenon is reported for West Mexico, but in a more restricted environment, when in contact with [ɾ] (either before or after) (Cárdenas, 1967[79]). In the Bajío, according to Boyd-Bowman (1960), /i/ and /u/ become less tense[80] before the sonorants [l] and [ɾ]. In Jalisco, Cárdenas (1967) describes /i/ as becoming lax when it is

[74] For example, the cluster [mb] is sometimes reduced to [m] while [mn] is reduced to [n] or changed to [ng], [gn], or [bn]. The phoneme [n] can be deleted in the cluster [ns] of the word *instante* (instant) [insˈtante], pronounced as [isˈtante] (Cárdenas, 1967, p. 50).

[75] These data are on page p. 50

[76] This is found in Cárdenas, 1967, p. 53

[77] Boyd-Bowman, 1960, p. 32

[78] Boyd-Bowman, 1960, p. 32

[79] Cárdenas, 1967, p. 9

[80] This is described as *abierto* (open).

preceded by the alveolars [n, s] (1967[81]). If the coda is [x^h] or [ɾ], then the variant is almost always medial, never open[82] (Cárdenas, 1967).

In opposition to Central Mexico, where stressless vowels are reduced or are deleted often, stressless vowels are generally maintained in this region, especially in West Mexico. Cárdenas asserts, "la pérdida completa… es rara en Jalisco[83]" (Cárdenas, 1967, p. 16). Word-initial vowels and word-interior vowels are also maintained more than in other dialects. At the end of the word, however, the last vowel can become relaxed or less tense. In contexts where medial vowels appear after [tʃ], they can be raised so that /e/ → [i] and /o/ → [u], according to Cárdenas (1967[84]).

3.2.3 Other Phenomena

Speech rate, educational level, socioeconomic status, and the interaction between orthography and pronunciation are four specific social factors that give this area its regional character.

The most significant sociolinguistic feature of this region's Spanish involves three processes of nasalization, which are indexical to educational attainment (the incorporation of any of these processes signals less education). First, there is a generalized heavy nasalization of vowels (in appropriate phonological environments) in the speech of less educated people

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[81] This is found on p. 75

[82] The /i/ of Central Mexico is realized as its open variant [ɪ] when it is followed by [x^h] or [ɾ]. Jaliscan Spanish, however, maintains the underlying form of the vowel in these contexts (Cárdenas, 1967, p. 75, p. 77).

[83] The translation of this statement is: "… complete loss… is rare in Jalisco."

[84] Cárdenas 1967, p. 40

(Muñoz-Ledo y Mena, 1934; Cárdenas, 1967[85]). Secondly, in the working class, there is a tendency to produce an epenthetic [n] at the end of syllables so that the word *mucho* (much) [ˈmucho] becomes [ˈmuncho] and *cállense* (be quiet!) [ˈkajense] becomes [ˈkajensen] (Boyd-Bowman, 1960; Cárdenas, 1967[86]). Thirdly, a process of *nasal resonance* after word final [s], changing words like *pues* (so, then) [ˈpwes] to [ˈpwesⁿ], is reported in the speech of the less educated. This last feature is perhaps the most significant social marker of the region.

Consonant clusters are generally maintained by the educated classes and are reduced by those with little schooling (Boyd-Bowman, 1960; Bramblia Pelayo, 1957). These observations are analogous to those made about Central Mexican Spanish in the previous section.

The realization of /d/ is another socioeconomic marker. On the one hand, /d/ can become [l] in the pronunciation of the working class and in the uneducated class. On the other hand, the [d] can become the fricativized [ð] at the end of words in cultured speech (Boyd-Bowman, 1960[87]). The table below provides some examples.

		Less educated	More educated
advertir (to warn) [aðβerˈtir]	→	[alberˈtir] ~	[aðβerˈtir]
admitir (to admit) [aðmiˈtir]	→	[almiˈtir] ~	[aðmiˈtir]
verdad (truth) [berˈðad]	→	[berˈðad] ~	[berˈðað]
ciudad (city) [sjuˈðad]	→	[sjuˈðad] ~	[sjuˈðað]

Table 3.11 Examples of the realization of /d/ and /l/ in West Mexico and the Bajío region.

[85] This is found on p. 14

[86] Boyd-Bowman, 1960, p. 85; Cárdenas, 1967, p. 50, p. 52

[87] This is on p. 57

Likewise, /k/ can point to educational attainment. [k] is lost word-finally, especially in the less educated classes, so that the pronunciation of *Isaac* (proper name) [iˈsak] becomes [iˈsa]. Furthemore, people with less educational attainment voice stops so that [g] replaces [k] in many words such as *codorniz* (quail) [kodorˈnis], pronounced as [godorˈnis] (Boyd-Bowman, 1960[88]).

/f/ can be realized as [h] in the Bajío, especially in fast speech and among the illiterate (Boyd-Bowman, 1960, p. 69). In Jalisco, /f/ → [h] is more generalized (Cárdenas, 1967[89]).

The sounds /ɾ/ and /l/ can also mark socioeconomic status. Metathesis is common in relation to /ɾ/ in the less educated classes, where [ˈpɾoβe] is the pronunciation of [ˈpoβɾe], *pobre* (poor). In the less educated classes, the /l/, described as alveolar and post-dental, undergoes both dissimilation and assimilation in words such as *delantal* (apron) which should be [delanˈtal] but is pronounced as [delanˈtaɾ] (Boyd-Bowman, 1960[90]).

In fast or casual speech, other transformations are also evident. Consonants can be replaced, added, or deleted[91]. For example, the word *morona* [moˈɾona] (crum) is pronounced as [boˈɾona], *válgame* [ˈbalgame] (my gosh!, colloquial) is pronounced as [ˈalgame], and the word

[88] This is on p. 60

[89] "La aspiración de la *f* actual se observó en gentes de todas condiciones" (the aspiration of *f* was observed in people of all conditions) (Cárdenas, 1967, p. 34). Boyd-Bowman's observation is on p. 69).

[90] This is on p. 79

[91] Please see Boyd-Bowman, 1960, p. 53 and Cárdenas, 1967, p. 53

hueso (bone) is pronounced as [ˈgweso]. As will be appreciated in consequent sections, these phenomena are general for all dialects of Mexican Spanish.

Vocalic changes are indexical of socioeconomic clas and education in this dialect. For example, vocalic units can be inserted, deleted, diphthongized, monophthongized, and metathesized in the speech of the less educated. The following table summarizes the findings reported in the literature:

Insertion and deletion of vocalic units	
aserrín (saw dust)	[aseˈrin] → [seˈrin]
tigre (tiger)	[ˈtigɾe] → [ˈtigeɾe]
Monophthongization of diphthongs	
autoridad (authority)	[awtoriˈðað] → [otoriˈðað]
paciencia (patience)	[paˈsjensja] → [paˈsensja]
Diphthongization of monophthongs	
diferencia (difference)	[difeˈrensja] → [difeˈrjensja]
Metathesis	
ciudad (city)	[siwˈðaˠ] → [sujðaˠ]

Table 3.12 Examples of the realizations of vocalic units in the less educated classes (Boyd-Bowman, 1960).

Sociolinguistic phenomena that is orthographically-driven is found for this dialect. According to Boyd-Bowman,"la antigua *h* aspirada persiste como rasgo del habla vulgar y

rústica[92]" (1960, p. 68), yielding words such as *heder* (to stink) with the pronunciation [heˈðeɾ] instead of the expected [eˈðeɾ] and *huír* (to flee) with the pronunciation [huˈiɾ] instead of the standard [uˈiɾ] (Boyd-Bowman, 1960[93]). This observation is broadly found in the Bajío region and among "campesinos y las clases pobres de los Altos[94]" (Robe, 1949, p. 43). A second instance of orthographically-driven phenomena involves the grapheme <v>. According to Boyd-Bowman, in Guanajuato, "la *v* labiodental suele mirarse como rasgo de la pronunciación culta[95]" (Boyd-Bowman, 1960, p. 54). These observations are analogous to what is mentioned for Central Mexico in the previous section. In Jalisco, however, "no hay preocupación ninguna por la [v] labiodental[96]" (Cárdenas, 1967, p. 28).

3.3 Northern Mexico

This description of Mexican Spanish now turns to another important regional dialect – Northern Mexico. This area is made up of the Mexican states of Baja California Norte, Baja California Sur, Sonora, Chihuahua, Nuevo León, Tamaulipas, Sinaloa, Durango, Zacatecas, and the northern areas of San Luis Potosí and of Hidalgo. Although the area termed Northern Mexico encompasses the largest geographical region of the country, only two comprehensive studies about sections of this region have been published: Gavaldón Guajardo's 1971 *El habla de Melchor Muzquiz, Coahuila* and Ávila's 1990 *El habla de Tamazunchale*. Future dialectological

[92] This is translated as: The old aspiration persists as a trait of vulgar and rustic speech.

[93] These examples are on p. 65

[94] This is translated as: Farmers and the poor clases of the Los Altos region.

[95] This is translated as: The labiodental *v* is usually seen as a trait of cultured pronunciation.

[96] The translation is: There is no importance given to the labiodental [v].

studies may provide the necessary evidence to further divide Northern Mexico into smaller dialectal regions. In general terms, phonological processes of weakening, aspiration, and deletion characterize the region (López Chávez, 1977).

3.3.1 Obstruents

Very few phonological processes affecting the voiced plosives are unique to Northern Mexican Spanish. Most notably, metathesis, deletion and substitution distinguish this dialect[97]. The most important processes are summarized below (in rule form) in table 3.13.

[97] The reader is asked to consult Ávila, 1990, p. 63 and Gavaldón Guajardo, 1971, p. 45-57

Metathesis

for example: *derrame* (spill) [deˈrame] → [reˈdame]

/d/ → another voiced consonant

for example: *deshidratarse* (to become dehydrated) [desidraˈtarse] → [desilaˈtrarse]

/d/ → [ø], in the morpheme [-aðo]

for example: *cansado* (tired) [kanˈsaðo] → [kanˈsao]

/d/ → [ø], in very common words, especially at the end of words

for example: *edad* (age) [eˈ ðað] → [eˈ ða]

/b, d, g/ → [ø] / __] $_{\text{syllable}}$ [+consonant], especially in "grupos cultos"

for example: *absorber* (to absorb) [aβsorˈβer] → [asorˈβer]

/g/ → [ø] ~ μ place

for example:

digno (dignified), [ˈdigno] → [ˈdinno] ~ [ˈdino]

iglesia (church) [iˈɣlesja] → [iˈʟesja] ~ [iˈʟesa] ~ [iˈʟesja]

/g/ → [ø] ~ [b] / __ [w]

for example: *guante* (glove) [ˈgwante] → [ˈwante] ~ [ˈbwante]

Table 3.13 Realization of /b, d, g/ in Northern Mexico.

The voiceless plosives are unstable in predictable ways. The general trends observed for the voiceless stops are summarized in the table below, for convenience (Gavaldón Guajardo, 1971[98]).

/p/ → [b]
/t/ → [d], *atmósfera* (atmosphere) [atˈmosfera] → [aðˈmosfera]
/k/ → [t] ~ [p] ~ [g] ~ [ɣ], *doctor* (doctor) [dokˈtoɾ] → [dogˈtoɾ] ~ [doɣˈtoɾ]
/k/ → [t] / __[t], *doctor* (doctor) [dokˈtoɾ] → [dotˈtoɾ]
/k/ → [t] ~ [p], *octubre* (octubre) [okˈtubɾe] → [otˈtubɾe] *práctica* (practice) [ˈpraktika] → [ˈpraptika]
/k/ → [g] ~ [ɣ] / __ voiced consonants, *tecnológico* (technological) [tekноˈloxʰiko] → [tegnoˈloxʰiko] ~ [teɣnoˈloxʰiko]

Table 3.14 Reported phonological changes of voiceless plosives in Northern Mexico.

Consonant clusters, as in other Mexican dialects, are simplified, especially in very common words such as *perfección* (perfection) [perfeksˈjon], which yields [perfegsˈjon] or [perfesˈjon] (Gavaldón Guajardo, 1971[99]).

The emergence of the allophone [v][100] is peculiar. Phillips (1967, 1982) and Lope Blanch (1989) report [v] in Northen Mexico. According to Gavaldón Guajardo, however, this phone

[98] Please consult page 67.

[99] These examples are on page 68.

only occurs in formal situations such as broadcasting, where speech is "ultracorrected", so that the grapheme <v>is pronounced as [v] instead of the expected [b] (1971, p. 59).

Gavaldón Guajardo suggests a hybrid symbol [ɸ^{f}] to represent the labiodental fricative of Coahuila since, "no se ha recogido la articulación plenamente labiodental[101]" (1971, p. 62). Supporting this claim is Ávila's 1990 description of /f/, which ranges from a labiodental fricative, produced with a tenseness or an occlusive component, to a labiodental fricative, produced with a labialized coarticulation (Ávila, 1990).

According to Canfield (1982), Navarro Tomás (2004), and other scholars who have sprinkled observations about Northern Spanish in their research, the velar fricative in Northern Mexico is "más abierta y suave que la /x/ castellana[102]", unless it appears before [w], in which case it is a true velar fricative (Canfield, 1981, p. 72). Therefore, for this dialect, the symbol [h] is a better representation of the sound.

It is hard to assertain the status of /tʃ/ in the dialect. In general, scholars assume that, for Northern Mexico, /tʃ/ → [tʃ] ~ [ʃ]. García Fajardo asserts that "la gama de variantes se extiende en total a catorce realizaciones claramente preceptibles[103]" (1984, p. 53). For a summary of the most salient realizations of this phoneme, according to García Fajardo, please refer to table 3.15.

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[100] As can be expected, Spanish has phonologically-driven instances of [v] as a realization of /f/ due to coarticulation in words such as *afgano* (Afgany). Here, [f] becomes [v] due to the voiced segments that surround it (Lope Blanch, 1993, p. 213).

[101] In other words, the labiodental pronunciation has not been observed.

[102] The translation is: more open and softer than the /x/ of Castile.

[103] The array of variants is extended to fourteen realizations that are clearly perceptible. In her text, [š] symbolizes the palatal fricative, IPA: [ʃ]

For San Luís Potosí's Spanish, Ávila describes a /tʃ/[104] that is "menos mojada y menos interior en el paladar [con] gran dominio del elemento fricativo, que tiene corta duración de tensión media[105]" (1990, p. 60). In this particular area, /tʃ/ is so weakened that there are cases of minimal pairs involving [tʃ] ~ [ʃ] and [s], as in [ʃoˈlote] and [soˈlote][106] (Ávila, 1990, p. 40).

/tʃ/ → [š] / __ [a, e, o]	
Examples:	*noche* (night), [ˈnotʃe] → [ˈnoʃe]
	macho (male), [ˈmatʃo] → [ˈmaʃo]
	aprobechando (to be taking advantage of something), [aproβeˈtʃanðo] → [aproβeˈʃanðo]
/tʃ/ → [ŝ] / [n] __	
/tʃ/ → [ŝ] / ___ [i]	
[ŝ] symbolizes a postalveolar fricative	
Examples:	*rancho* (ranch) [ˈrantʃo] → [ˈranŝo]
	chiste (joke) [ˈtʃiste] → [ˈŝiste]

Table 3.15 Some realizations of /tʃ/ in Northern Mexico (García Fajardo, 1984).

The output of the phoneme /s/ also makes this region uniquely different from other regions of Mexico. In particular, aspiration is reported. Mexico is not considered to be a Spanish-speaking country characterized by aspiration. Scholars evidence that words like determiners,

[104] This is represented as [š] in the text.

[105] That is, less palatal [with] great strength of the fricative trait, it is short and its tension is medial.

[106] According to the author, [ʃoˈlote] means "naked". [soˈlote] is the augmentative of "alone".

adjectives, and plurals, almost always require an aspiration of /s/ in Northern Mexican Spanish[107] (Gavaldón Guajardo, 1971). Phonologically, aspiration is reserved for syllable final /s/ preceded and followed by a vowel[108] (Gavaldón Guajardo, 1971; Ávila, 1990). Tables 3.16 and 3.17 summarize the most salient features reported in the literature for /s/.

[107] The author states: "Donde es frecuente encontrar la aspiración es en la terminación de los artículos y adjetivos, sobre todo cuando la palabra siguiente comienza por vocal [y en] la primera persona del plural" (Gavaldón Guajardo, 1971, p. 87).

Some examples include the utterance *dos huevos* (two eggs), which would be [ˈdoh ˈweβos] instead of [ˈdos ˈweβos].

[108] For example, words such as *más* (more), *nomás* (no more, colloquial), and *antes* (before) are more commonly pronounced as [ˈmah], [noˈmah] and [anˈteh] than as [ˈmas], [noˈmas] and [anˈtes]

Regular [s]

Described as “plana, tensa, y larga” (plain, tense and long).

Short predorsal [s]

Described as “predorsoalveolar convexa que puede ser tanto tensa y larga como relajada y corta” (predorso-alveolar and curved that can be tense and long or laxed and short).

Long [s]

Described as “predorsoalveolar convexa que puede ser tanto tensa y larga como relajada y corta” (predorso-alveolar and curved that can be tense and long or laxed and short).

[h]

Described as a laringeal aspiration

[θ̟]

Described as an interdental [s]

Free Variation:

/s/ → laxed / between vowels

/s/ → [ø] / between vowels

/s/ → [h] / between vowels

Table 3.16 Realizations of phoneme /s/ in Sinaloa (Hidalgo, 1990)

[s], described as plain
[θ̟], described as flat and articulated with the tongue between the teeth
[h], described as an aspiration

Table 3.17 Realizations of phoneme /s/ in Coahuila (Gavaldón Guajardo, 1971).

Lastly, voicing affects /s/, transforming it to [z] before a voiced consonant such as [l] and [b], like in all other dialects of Mexican Spanish.

3.3.2 Sonorants

The phoneme /j/ is highly unstable in this area, ranging from fricativization to deletion (Gavaldón Guajardo, 1971; Alonso, 1961; Henríquez Ureña, 1977; Ávila, 1990; Espinosa, 1909). Ávila, for example, describes four levels of variation, from the faithful approximant pronunciation to the loss of the phone between vowels (1990, p. 57). The distribution of the allophones of /j/ is summarized in the table below[109]:

[109] Some of the symbols have been changed as the word processing program used for this dissertation did not have the means to transcribe the symbols exactly as presented by the author. These observations were presented by Gavaldón Guajardo, 1971, p. 79.

/j/ → [ẏ] / [+vocalic] __ [+vocalic]
(very open allophone)

/j/ → [ŷ], / [l] ___ ,
[+nasal] ___
(fricativized consonantal allophone)

/j/ → [ʲ] / [+vocalic] __ [+vocalic] (semivocalic sound)
(fricativized vocalic allophone)

/j/ → [ø] / __ [í]
(deletion)

Table 3.18 Realization of /j/ in Northern Mexican Spanish.

The nasals are as predictable in Northern Mexico as they are in other areas[110]. Three unique characteristics of the dialect, however, are reported. First, /n/ is velarized at the end of the syntactic phrase. Second, the sound [n] is added to words such as *mucho* (much) (Espinosa, 1909[111]). Lastly, assimilation in this area can be so extreme that, according to Ávila, /n/ → [ɲ] / __[+palatal] [112].

[110] To provide a few illustrative examples, [m] → [n] / ___ # as in *álbum* (album) [ˈalbum], which turns into [ˈalbun]. The cluster [mb] may be simplified to [mm] or [m] as in *también* (also) [tamˈbjen], which becomes [tamˈmjen] or [taˈmjen]. The cluster [mn] can be realized as [nm], [mm], [n], or [ⁿm] as in the pronunciation [koⁿˈmiɣo] of the word *conmigo* (with me) (Gavaldón Guajardo, 1971).

[111] The reader is asked to consult page 34.

[112] The author uses the symbol [ñ]. This generalization is taken from Ávila, 1990, p. 57.

The realization of /l/ in the Northern area of Mexico is similar to that of all other areas of Mexico, assimilating so that it becomes dentalized before a dental consonant, palatal before the sound [i], and devoiced when preceeded by a voiceless segment (Gavaldón Guajardo, 1971[113]). Interestingly, /l/ → [ɾ] is common so that *alquilar* (to rent), pronounced as [alkiˈlaɾ] becomes [aɾkiˈlaɾ] (Alonso, 1961[114]). /ɾ/ and /r/ have vacillating outputs "con la misma frecuencia en todas las clases sociales[115]" (Gavaldón Guajardo, 1971, p. 83). Table 3.19 provides a summary of what has been found in the dialect[116].

/r/ → [r̲], described as long, alveolar, fricativized and liquid.
/r/ → [r], described as the regular trill.
/ɾ/ → [ř] / __ #, described as a fricative flap
/ɾ/ → [ɾ̲] / [t, p, k] ___, described as a voiceless flap
/ɾ/ → [ø], in infinitives, in New Mexico only
Metathesis of [ɾ], as in *servir* (to serve) [seɾˈβiɾ] → [seˈβɾiɾ]
/ɾ/ → [l]
/ɾ/ → [ř], described as an assibilated flap
/r/ → [r̥]/ ___ [+ voiceless consonant], described as a a devoicing of the trill

Table 3.19 The realization of /r/ and /ɾ/ in Northern Mexico.

[113] This information is found on pages 82-83.

[114] This information is found on page 241.

[115] The translation is: with the same frequency among all social classes.

[116] Some of the symbols have been changed as the word processing program used for this dissertation did not have the means to transcribe the symbols exactly as presented by the author.

3.3.3 Vowels

According to Gavaldón Guajardo (1971), the articulation of /a/ in this area is generally long, becoming even longer and somewhat open when the following /s/ has become aspirated. And, /i/ is often very open before [j] so that they almost merge, creating a long [i] and an absent [j]. Gavaldón Guajardo reports *trueques vocálicos* or vocalic changes, which occur when there is substitution of one vowel for a completely different one (1971, p. 83).

Ávila (1990) describes a process of vocalic opening, summarized in the table 3.20. With the exception of the last two rules presented below, Ávila's observations about Northern Mexican Spanish are not unexpected as they are present in all dialects of Mexican Spanish.

[+vocalic] → [+open] / ___ [r, l, n]
[+vocalic] → [+open] / [r] ___
[+vocalic] → [+open] / ___ [r]
[+vocalic] → [+open] / [ɾ] ___
[+vocalic] → [+open] / ___ [ɾ]
[+vocalic] → [+open] / ___ [+consonantal]
[+vocalic] → [+open] / ___ [i̯]]$_{\sigma}$ (before a semivowel, at the end of a syllable)

Table 3.20 Realization of stressed vowels in Northern Mexican Spanish according to Ávila (1990).

Surrounded by the sound [s], stressless vowels can be deleted. The preferred way to resolve vowels in hiatus is by using one of these strategies: transforming one of the vowels into a semivowel[117], shifting the stress along with merging the adjacent vowel[118], or by inserting an

[117] As in *traerán* (you/they will bring) [traeˈɾan], which becomes [trajˈɾan] (Ávila, 1990, p. 55).

[118] As in *maestro* (teacher) [maˈestɾo], which becomes [ˈmajstɾo] (Ávila, 1990, p. 55).

epinthetic [j][119] (Ávila, 1990, p. 41). Word initial [u] or [w] trigger the insertion of a [g] as in the word *hueso* (bone) [ˈweso], which can become [ˈgweso] (Ávila, 1990).

Nasalization of vowels in Northern Spanish follows the general trends described for all dialects, where contact with a nasal consonant nasalizes the vowel. Strong velarization is reported for Northern Mexican Spanish when the nasal coda is followed by the velar [g] as in the word *venga* (he/she comes) (Ávila, 1990[120]).

3.3.4 Other Phenomena

Phenomena linked to a speaker's social class, educational level, and age mark differences in the speech of this area. Ávila states that "la pérdida o la relajación tienen valor sintomático en los grupos de escolaridad[121]" (1990, p. 46).

Substitution is common among the illiterate, especially for /f/, /x^h/[122], and /b/. /f/ is substituted for [x^h], especially before the sound [w] or [u] as in *fui* (I went) (Ávila, 1990[123]). [x^h] can be substituted for [ø] as in the word *fijate* (pay attention!), pronounced as [ˈfiate] instead of

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[119] As in *leer* (to read), pronounced as [leˈjer], instead of the expected [leˈer] (Ávila, 1990, p. 55).

[120] The reader is asked to consult page 43.

[121] That is, the loss or weakening has a symptomatic value among the educated.

[122] A better representation of this soun is [h]. Please see earlier discussion on this sound.

[123] Examples of this type of change are on page 56.

the faithful [ˈfixʰate] (García Fajardo, 1984[124]). Lastly, the plosive /b/ can be substituted for [g] before the sound [w], as in the word *bueno* (good) (García Fajardo, 1984[125]).

Vocalic innovations based on sociolinguistic factors are also common. Ávila writes, "entre más jóvenes, menos cierre [es] más frecuente en los hombres que el las mujeres [y] el grado de cierre vocálico disminuye en proporción directa con el grado de escolaridad[126]" (1990, p. 51). In addition, contigious vowels of the same type produce vocalic reduction, as in the popular phrase *la agua* (the water)[127], which becomes [lˈaɣwa] instead of the expected [la ˈaɣwa]. Word initial stressless vowels can also disappear, as in *alacena* (cupward) [alaˈsena], which becomes [laˈsena]. The reverse can also occur, where ephenthetic vowels appear as in words *hoy* (today) [ˈoj], which can become [aˈoj] (Ávila, 1990). Vowels can be changed as in *venimos* (we come) pronounced as [beˈnemos] insted of the expected [beˈnimos] and the hypercorrection of *vaciar* (to pour), pronounced as [baˈseaɾ] intead of the standard [baˈsjaɾ] (Ávila, 1990). Lastly, the weakening of vowels between two [s] sounds is a social marker as the

[124] Examples of this type of change are on page 63.

[125] Examples of this type of change are on page 63.

[126] This can be translated as: The younger the person, the less they close them. [It is] more frequent among men than women [and] the level of closing diminishes in direct proportion to amount of schooling.

[127] "La agua" is a non-standard version of the determiner phrase "el agua", which means 'the water'. Here, "la agua" is used by the author.

illiterate and working class devoice or delete the vowel more frequently in this dialect (Ávila, 1990[128]).

3.4 The Yucatán Peninsula

Geographically, the Yucatán peninsula includes the states of Tabasco, Campeche, Quintana Roo, and Yucatán. Preliminarily, one would expect that the four aforementioned states would be classified under the same dialectal zone as they are in the same peninsula. However, based on the body of published investigations, it can be concluded that the Yucatán peninsula houses two distinct dialects: The dialect of the Yucatán peninsula (defined by the states of Yucatán and Quintana Roo) and the variety of the Gulf of México and the Lowlands (defined by the states of Tabasco and Campeche). The main feature used in dividing the Yucatán Peninsula into two dialects is the realization of /s/.

In Yucatán and Quintana Roo, aspiration of syllable final [s] is not reported[129]. In fact, Suárez writes "la S final de sílaba que se aspira en casi toda la costa del Golfo de México y casi desaparece en Tabasco y parte de Campeche, se mantiene con toda su intensidad en Yucatán[130]" (1979, p. 66). This fact is concurred upon in Lope Blanch's investigations[131]. Studies on the speech of Tabasco and Campeche do report the aspiration of [s]. Thus, this dissertation will treat Tabasco and Campeche as one dialectal area and Yucatán and Quintana Roo as another.

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[128] All the Avila (1990) examples presented in this paragraph are on pages 32-34.

[129] The only author who reports loss of [s] for this area, though not aspiration, is García Fajardo. She clarifies, "[la] pérdida de [s] … ocurrió con frecuencia bajísima." ([the] loss of [s] … occurred with very low frequency) (1984, p. 62).

[130] This can be translated as: The S at the end of a syllable that is aspirated in almost the entire coast of Mexico and that is almost deleted in Tabasco and part of Campeche is maintained with all of its intensity in Yucatán" (Suárez, 1979, p. 66).

[131] Please refer to Lope Blanch 1987, p. 34 and 1993, p. 132.

The Spanish of the Yucatán peninsula region is marked by six important features: glottalized vowels and consonants, depalatalization of [ɲ] and [j], the appearance of consonant clusters and phones that are unconventional to the Spanish language, a strong presence of occlusive sounds, the lack of aspiration of /s/ in spite of the area's proximity to the Caribbean, and a distinctive pattern of intonational contours. These will be explored in detail in the following sections.

3.4.1 Obstruents

Phenomena seen in other varieties of Spanish are also attested in this area, especially for the voiced obstruents. The following is a summary of Suárez' 1979 report:

/b/ → [b̥] / __ [t], as in *obtener* (to obtain)
/b/ → [k] / __ [s], as in *absoluto* (absolute)
/d/ → [ø], word finally
/g/ → [ø] / __ [w], as in the word *agua* (water)
[ø] → [g] / # __, as in the word *huarache* (a type of sandal)

Table 3.21 Obstruent phenomena in Yucatán.

The behavior of the voiceless stops sets the dialect apart. This dialect has distinctive outputs for the voiceless stops. First, a reported glottalization of the voiceless stops /p, t, k/ is characteristic, which is not observed in any other area of Mexican, Latin American, or peninsular Spanish[132]. Secondly, this dialect is also characterized by a generalized lack of spirantization of

[132] Lope Blanch does not feel that glottalization is characteristic of the area, however. In fact, he reports that it is "absolutely insignificant." He writes: "el número de testimonios de glotalización consonántica reunido en nuestras encuestas sobre el español de Yucatán representan una proporción absolutamente insignificante, que de ninguna manera puede invocarse como

/b, d, g/ in contexts where their fricative counterparts should appear and by an alveolar articulation of /d/ and /t/[133] (Lope Blanch, 1989[134]). Thirdly, García Fajardo describes a sporadic palatalization of /t/ and /k/ and /x/ when preceded by the semiconsonant [j], as in the words *tiene* (he/she/it has) and *quiere* (he/she/it wants) (1984[135]).

3.4.2 Sonorants

Yucatán Spanish has an interesting distribution of the flap [ɾ] and the trill [r]. Four opposing processes, organized in the following table, are presented in Suárez' 1979 work: a process of deletion by which consonant clusters that include this phone are simplified, a process of insertion, a process of metathesis by which one of the clusters is simplified and another is created, and a process of acoustic confusion by which [ɾ] becomes [l] and [l] becomes [ɾ][136]. These processes are sporadic but common and are in free variation.

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caracterizadora del haba hispanoyucateca" (1993, p. 281). García Fajardo specifies that the glottalization of /p, t, k/ is normally reserved for syllable initial voiceless stops in a stressed syllable (1984, p. 35).

[133] All research on the Spanish language argues that /d/ and /t/ are dental, not alveolar. Lope Blanch, however, asserts that these phones are articulated so strongly that they are not dental but are alveolar instead (Lope Blanch, 1989 p. 144). García Fajardo also finds that an alveolar /t/ and /d/ is very common, particularly when preceded by [n, l, s, j] (1984, p. 36; p. 48).

[134] This information can be found on page 144. These observations are confirmed by García Fajardo (1984, p. 37).

[135] These examples are on page 35.

[136] This is also reported by Amado Alonso (1961), quoting Henríquez Ureña.

Deletion

/ɾ/ → [ø], for example *madrastra* (step mother)

[maˈðɾastɾa] → [maˈðastɾa]

Insertion

[ø] → [ɾ], for example *armatoste* (contraption)

[armaˈtoste] → [armaˈtɾoste]

Metathesis

for example *pobre* (poor)

[ˈpoβre] → [ˈproβe]

Acoustic confusion

/ɾ/ → [l], for example *cajera* (cashier)

[kaˈxʰeɾa] → [kaˈxʰela]

/l/ → [ɾ], for example *tololoche* (base string instrument)

[toloˈlotʃe] → [toɾoˈlotʃe]

Table 3.22 Distribution of the flap according to Suárez (1979).

Lope Blanch (1987) and García Fajardo (1984) also report interesting realizations of the flap. These are summarized in the following table, for convenience.

[ɾ], described as:

a retroflex that alternates with an alveolar flap.

(Lope Blanch, 1987, p. 34)

[ɾ], described as:

a prepalatal retroflex

an assibilated flap

a *rehilajada* (laxed) flap

a devoiced flap (especially before [l] and at the end of a word)

a trill

[ø] (in syllable final position)

a lateralized flap approximating the sound [l].

(García Fajardo, 1984, p. 68-70)

[r], described as:

the expected alveolar trill

an alveolar fricative trill

a retroflex

a voiceless *rehilajada* (laxed) trill

a voiceless assibilated trill.

(García Fajardo 1984, p. 71-73)

Table 3.23 Interesting realizations of [ɾ] and [r] in the Spanish of the Yucatán peninsula.

As in Northern Mexican Spanish, the region's dialect vacillates between the deletion and the insertion of [j] so that words such as *carretilla* (small carriage) [kareˈtija] can become [kareˈtia] and words such as *María* (proper name) [maˈria] can become [maˈrija], even in the orthography, giving <carretía> and <Maríya> (Suárez, 1979, p. 68). García Fajardo concurs with Suárez' findings, asserting that /j/ is realized in many forms in Valladolid, Yucatán, from a

marked and *rehilada* (fricativized) [j] to the absence of sound (1984, p. 50). Alonso reports that /j/ can become [i] in Yucatán (1961[137]).

The realization of nasal consonants in this area is very interesting in some ways and very predictable in others. Simplification of adjacent nasals is the most common phenomenon reported by Suárez (1979), García Fajardo (1984), and Lope Blanch (1987), a phenomenon that is commonly reported for other dialects of Mexican Spanish. One curious phenomenon in this area involves the nasal palatal /ɲ/, represented orthographically as <ñ>. This phoneme is depalatalized, so that *niño* (child) [ˈniɲo] and *compañía* (company) [compaˈɲia] are pronounced as [ˈninjo] and [kompaˈnja]. A second interesting process particular to this dialect is that the alveolar nasal /n/ can be deleted in informal contexts, producing examples such as [ˈtjee] for [ˈtjene] *tiene* (she/he/it has). At the same time, insertion of [n] due to the presence of another [n] can occur, as exemplified by *andadera* (walker), which becomes [andanˈdeɾa] (Suárez, 1979[138]).

Three additional noteworthy observations will conclude this section. Lope Blanch (1987) mentions that word-final /n/ is changed to the bilabial nasal [m] (1987[139]). Canfield (1981) reports that word-final /n/ is changed to the velar nasal [ŋ][140]. These changes are represented by the rule /n/ → [m] ~ [ŋ] / __ #, as in the word *Yucatán* (the name of the Mexican state), pronounced with a word final [m] or [ŋ]. García Fajardo (1984) also reports the deletion of

[137] The reader is asked to consult page 352.

[138] All of these examples appear on page 69.

[139] Please see Lope Blanch, 1987, p. 34.

[140] Please consult Canfield, 1981, page 63. García Fajardo describes the same phenomenon (1984, p. 76).

syllable final [n], where the preceding vowel absorbs the nasal feature, creating words such as [ˈãda] instead of [ˈanda], *anda* (he/she goes)[141].

3.4.3 Vowels

Stressed vowels are stable in this area, including those in contact with nasals and velars[142]. Stressless vowels in this region are not unlike those found in other regions, undergoing similar processes and permitting change, especially in colloquial contexts and among people who are less educated (Suárez, 1979[143]). The most common changes involving stressless vowels are summarized below:

/e/ → [a], as in *lagaña* (eye mucus), [laˈɣaɲa] → [leˈɣaɲa]
/e/ → [i], as in *comelón* (big-eater), [komeˈlon] → [komiˈlon]
/o/ → [ø] / __ #, as in *rebozo* (a type of shawl), [reˈβoso] → [reˈβos]
/e/ → [ø] / __ #, as in *huarache* (a type of sandal), [wuaˈratʃe] → [wuaˈratʃ]
[+vocalic, β place] → [ø] / ____ [+vocalic, β place], as in the phrase *la amiga* (the friend, feminine), [la aˈmiɣa] → [laˈmiɣa]

Table 3.24 Mutations of stressless vowels in the Yucatán penisula.

[141] Please see García Fajardo (1984, p. 76).

[142] Interestingly, García Fajardo does report that vowels are nasalized significantly more if they are common (and if they appear in a syllable that ends in a nasal consonant), as in the word *con* [ˈkõn] (with) (1984, p. 28). In addition, the author reports that velarized vocalic segments always occur in conditioning environments (in contact with a velar phone) (García Fajardo, 1984, p. 29).

[143] Please consult page 70.

Vowels can also be glottalized. Lope Blanch observes, "la occlusion glótica puede acompañar a las vocales castellanas[144]" (1987, p. 64). This unique characteristic is reserved to open syllables. Suárez reports, for example, the word *madre* (mother) [ˈmadre] becomes [ˈmaʔre], "with a deleted [d] and a glottalized [a]" (1979, p. 77-80).

Vocalic weakening, a phenomena reported in other areas such as Central Mexico, and even deletion due to contact with /p, t, k/ or /s/ is reported[145] (García Fajardo, 1984).

García Fajardo (1984) reports changes affecting diphthongs. In Valladolid, Yucatán, diphthongs can become monopthongs by lengthening the first half of the diphthong and pronouncing the second half as if it were in the next syllable. For example, the word *tienen* (they have), which is syllabified as tie**.**nen, can be syllabified as ti**.e.**nen by a process of lengthening of the [i] (García Fajardo 1984[146]).

3.4.4 Other Phenomena

For the working class with less access to formal schooling (and in fast speech), aspiration of orthographic <h> has been extended to many words (for example, *albahaca* (basil) and *mohoso* (moldy), pronounced as [alˈbaka] and [moˈoso] in other regions, have become [alˈbahaka] and [moˈhoso]) in this region, according to Suárez (1979[147]). In addition, what

[144] In other words, glottal occlusions can become part of the vowels of the Spanish language.

[145] When surrounded by [s], for example, vowels can be completely deleted (García Fajardo, 1984, p. 22).

[146] Please see page 32.

[147] Please consult pages 64-65.

should be a [x], [h] or [x^h][148] in words such as *jugo* (juice) is sometimes changed to [f], producing [ˈfuɣo] instead of the expected [ˈx^huɣo] (Suárez, 1979[149]).

Vocalic phones also mark social class in this variety. The following table syhthesizes the information presented by scholars in relation to vocalic sounds as markers of social class and educational attainment.

General Process: monopthong → diphthong

1) By insertion:
examples: *diferencia* (difference) [difeˈrensja], which becomes [difeˈrjensja]
comprendo (I comprehend) [komˈprendo], which becomes [komˈprjendo]

2) By stress change and vowel raising:
examples: *maestro* (teacher) [maˈestro], which becomes [majsˈtro]
maíz (corn) [maˈjs], which becomes [ˈmajs]

3) By metathesis of the diphthong:
incienso (incense) [inˈsjenso], which becomes [inˈsensjo]

4) By raising the stressless vowel:
deseaste (you wanted) [deˈseaste], which becomes [deˈsjaste]

Table 3.25 Diphthongization processes described for the Yucatán penisula.

[148] Lope Blanch mentions that the velar voiceless fricative of this area is very soft, alternating between [h] and [x^h] (1987, p. 34).

[149] For more examples, please see Suárez 1979, p. 64-65.

In addition to the already mentioned glottalized vowels and stops, Maya-Spanish bilingualism has influenced the Spanish of the area in other ways, especially at the phonotactic level. Word-final palatal voiceless affricates occur in this region, which is not seen in other regions, as in the word *holoch*[150] (Suárez, 1979). This phonotactic influence may be responsible for the types of stressless vowel deletions summarized in table 3.24. Also, the cluster [ksk] appears word-initially as in *xkuluch*[151] (Suárez, 1979), a cluster that is not phonotactically possible in Spanish. Lastly, this dialect has a voiceless palatal fricative [ʃ] and a glottal stop [ʔ] as in [ʃik] (axial) and [waskʔop] (bump on the head)[152], which is highly marked in the language (Lope Blanch, 1987).

3.5 The Gulf of Mexico and the Lowlands

The region cateogorized in this dissertaion as the Gulf and Lowlands of Mexico includes the coastal regions surrounding the Gulf of Mexico (including Veracruz), the state of Tabasco and Campeche, as well as the coastal areas of the states of Guerrero, Chiapas and Oaxaca.

Four peculiarities set this dialect apart from any other Mexican variety discussed thus far. First, aspiration of /s/ occurs (though each area has different qualities of aspiration). Second, the realization of /x/ is softer than what is common for the rest of the country. Third, [ŋ] is reported. Lastly, some of the regions included in this area make use of the *voseo* form of the pronominal and verbal system.

[150] The author does not give a meaning for this Maya word (Suárez, 1979, p. 77-80).

[151] The author does not give a meaning for this Maya word (Suárez, 1979, p. 77-80).

[152] This is *coscorrón* in Spanish (bump on the head) (Lope Blanch 1987, p. 24-26).

The most well researched state of this area is the state of Tabasco. For example, Gutiérrez Eskildsen (1941, 1944) and Williamson (1986) extensively studied this area. Garza Cuarón (1987) focused her research in the speech of Oaxaca and Menéndez Pidal (1962) surveyed the Spanish of Veracruz. Due to the fact that Veracruz and Oaxaca are marked by the use of [ŋ] and due to the fact that Oaxaca is Veracruz' neighbor, this dissertation will include Tabasco, Campeche, Veracruz and Oaxaca as part of the Gulf and the Lowlands region of Mexican Spanish.

3.5.1 Obstruents

This discussion of the Gulf and the Lowlands dialect of Mexican Spanish will begin with a summary of the phenomena affecting the voiceless stops in Tabasco, presented by Gutiérrez Eskildsen (1941 and 1944) and summarized in the following two tables below[153]:

[153] Not included in this chart is one feature specific to the state of Tabasco, a general process of palatalization of [t] and [k], which occurs sounds before [i] (Gutiérrez Eskildsen, 1944, p. 123).

/p/	→ [k] / __ [s], for example *corrupción* (corruption), [korupˈsjon] → [koruˈksjon]
/p/	→ [u] ~ [w], for example *cápsula* (capsule), [ˈkapsula] → [ˈkawsula]
/p/	→ [ø] / __[s], for example *eclipse* (eclipse), [eˈklipse] → [eˈklise]
/t/	→ [l], for example *atmósfera* (atmosphere), [atˈmosfeɾa] → [alˈmosfeɾa]
/k/	→ [i] / __[t], for example *recto* (straight), [ˈrekto] → [ˈrejto]
/k/	→ [u] / __[t], for example *directo* (direct), [diˈrekto] → [diˈrewto]
/k/	→ [ø] / __]$_{\sigma}$ [+consonantal], for example *doctor* (doctor), [dokˈtoɾ] → [doˈtoɾ]
/k/	→ [g], for example *carraspera* (throat irritation), [karasˈpeɾa]→ [garasˈpeɾa]
[ks]	→ [s] ~ [h], for example, *extranjero* (foreigner) [ekstranˈxʰeɾo] → [estranˈheɾo] ~ [ehtranˈheɾo]
/s/	→ [t], for example, *retorsijón* (colic) [retoɾsiˈxʰon] → [retoɾtiˈhon]

Table 3.26 Voiceless obstruent changes as reported in the Gulf of Mexico and Lowlands regions.

The voiced stops have the same expected fricative outputs as they do in every other variety of Mexican Spanish. Below, the most characteristic transformations are recapitulated:

/b/ → [g] / __[w], for example *abuela* (grandmother), [aˈβwela] → [aˈɣwela]

/b/ → [m], for example *vagabundo* (vagabund), [baɣaˈβundo] → [baɣaˈmundo]

/b/ → [k] / __[s], for example *absoluto* (absolute), [absoˈluto] → [aksoˈluto]

[ø] → [b], for example *lamer* (to lick), [laˈmeɾ] → [lamˈbeɾ]

[w] → [b], for example *aurora* (dawn), [awˈɾoɾa] → [aβˈɾoɾa]

/d/ → [ø] / #__, for example *donde* (where), [ˈdonde] → [ˈonde]

/d/ → [ø] / [+vocalic]__[+vocalic], for example *hablado* (spoken), [aˈβlaðo]→ [aˈβlao]

/d/ → [g] / __[ɾ], for example *madrina* (godmother), [maˈðɾina]→ [maˈɣɾina]

/d/ → [ɾ], for example *párpado* (eyelid), [ˈpaɾpaðo]→ [ˈpaɾpaɾo]

/d/ → [l], for example *advertir* (to warn), [aðbeɾˈtiɾ]→ [albeɾˈtiɾ]

[ø] → [d], for example *iva* (tax), [ˈiβa]→ [ˈdiβa]

/g/ → [d] / __[ɾ], for example *suegro* (father-in-law), [ˈsweɣɾo] → [ˈsweðɾo]

/g/ → [ø] / __ [+nasal], for example *ignorante* (ignorant), [iɣnoˈɾante]→ [inoˈɾante]

/g/ → [ø] /__[w], for example *agua* (wanter), [ˈaɣwa]→ [ˈawa]
[ø] → [g] / __[w], for example *viruela* (smallpox), [biˈrwela]→ [biˈɣrwela]
/g/ → [b], for example *gorrión* (sparrow), [goˈrjon]→ [boˈrjon]

Table 3.27 Voiced stop changes in the Tabasco area.

In addition to the phonological innovations presented above, Williamson's (1986) investigation describes the following phenomena for the area of Tabasco:

/b, d, g/→ [weakened or voiceless] / [h] __, __ [l], __ [r]
/b, d, g/→ [β, ð, ɣ] / [+vocalic] __ [+vocalic], sporadically

Table 3.28 Additional phenomena presented for /b, d, g/ in Tabasco.

Garza Cuarón describes that the voiced obtruents /b, d, g/ have the same realizations in Oaxaca than in all of Mexican Spanish, except for [d], which is devoiced word finally but maintained in the "higher classes and in careful speech" (1987, p. 40). Likewise, Menéndez Pidal (1962) does not report untypical behavior for either the voiceless or voiced stops in the speech of Veracruz.

In the Gulf and the Lowlands, orthographic <h>, which does not have phonetic value in most Mexican varieties, is actually realized as as [h] or [f] so that *hacer* (to do) [aˈsɛr] is pronounced as [haˈsɛr] and *rehuso* (to refuse) [reˈuso] is realized as [reˈfuso]. Like in other Mexican varieties, /x^h/ (better represented by [h] in this dialect) can become [f] when it is

preceded by [w] or [u] as in *justicia* (justice) [husˈtisja] which becomes [fusˈtisja] (Gutiérrez Eskildsen, 1941[154]).

The Spanish of Oaxaca has two realizations for /f/, [ɸ] and [f], a phenomenon that is appreciated in other Mexican varieties. Canfield (1981) reports analogous realizations of /f/ in the Gulf and Lowlands.

In Tabasco, Williamson (1986) reports that /tʃ/ undergoes a process of strengthening and weakening so that [tʃ] alternates with [š][155] and with [s̆][156]. Likewise, /tʃ/ has many realizations in Oaxaca, including: [s̈̌][157], which occurs before [e, i]; [s̈̆][158], which occurs before [a, o, u]; and [ṡ][159], which is not conditioned (Garza Cuarón, 1987). The aforewritten symbols have been modified due to the limitations imposed by the word processing system used. In the original text, these notations were hand-written.

[154] Please consult Gutiérrez Eskildsen, 1941, p. 20 for additional examples.

[155] In other words, a fricative with a weakened occlusion. These symbols are the ones presented by Williamson and do not concur with IPA. (Williamson,1986, p. 99-100)

[156] In other words, a fricative without an occlusion. These symbols are the ones presented by Williamson and do not concur with IPA. (Williamson, 1986, p. 99-100)

[157] Specifically, the author says, “muy adelantada, apical, alveopalatal de timbre agudo” (very fronted, apical, alveopalatal, of sharp tone) (1987, p. 43).

[158] Specifically, the author says, “menos adelantada” (less fronted) (1987, p. 43).

[159] Specifically, the author says, “dorsoprepalatal, muy mojada con predominio del elemento fricativo sobre el oclusivo dorsoprepalatal”, (Dorsopalatal, very wet, with a strong realization of the fricative element over the occlusive element) (1987, p. 43).

Williamson (1986) makes lengthy observations[160] about consonant clusters in Tabasco, which are summarized in the following table:

[sk] → [^{xh}k] (aspiration of [s])
[sp] → [^{h}p] ~ [^{s}p] (reduction of [s])
[ks] → [^{k}s] (reduction of [k])
[kt] → [^{k}t] (reduction of [k])
[pt] → [^{p}t] ~ [kt] ~ [^{k}t] (substitution of [p])
[ps] → [ks] ~ [p^{s}] (substitution of [p] or very reduced [s])
[tl] → [t̬l̥] ~ [t] (voiceless [l] or deleted [l])
[tr] → [tɾ] ~ [tʳ] ~ [t^{ɾ}] ~ [t̪^{ɾ}] (various levels of fricativization)

Table 3.29 Consonant cluster realization in Tabasco.

The phoneme /x/ has numerous realizations. No other Mexican area is reported to have as many allophones for /x/. As in other cases, the limitations imposed by the word processing system have made it necessary to modify some of the symbols. The following table organizes the information reported for this area by the various authors:

[160] These are on page 115.

[*x*], described as uvular, vibrant, tense, and occurring at the beginning of a word before the vowels [o], [u] and [a].
(Gutiérrez Eskildsen, 1941, p. 43)

[x̱], described as postpalatal, ocurring before [i].
(Gutiérrez Eskildsen, 1941, p. 43)

[h], described as aspirated and faringeal. No contexts were provided.
(Gutiérrez Eskildsen, 1941, p. 43)

[x] ~ [ʰ] ~ [h] ~ [ʱ] ~ [ɦ] ~ [k] ~ [k+], the superscripted symbols are weakened aspirations, [k+] represents a palatalized /k/.
(Williamson 1986, p. 99-100)

[x'] ~ [h], described as a fronted velar fricative that alternates with a glottal fricative.
(Canfield 1981, p. 62)

Table 3.30 Realizations of /x/ in the Gulf of Mexico and the Lowlands.

Of the states included in this dialectal region, Oaxaca is the only state that does not include aspiration as part of its analysis of /s/ (Garza Cuarón, 1987). However, some unique realizations for /s/ are noteworthy and have been summarized in the table below:

/s/ → [ʒ] / __ [+sonorant] (voiced)
/s/ → [ʒ] / __ [j] (palatalized and voiced)
/s/ → [ʐ] / __ [t] (dentalized)
/s/ → [ʃ] / __ [p, t, k] (palatalized)
/s/ → [s:^{r}] / __ [r] (lengthened and assibilated)
/s/ → [s:] / __# (lengthened)

Table 3.31 Realizations of /s/ in Oaxaca.

Menéndez Pidal reports aspiration as "el carácter que más distingue el centro mexicano de la costa de Veracruz[161]" (1962, p. 144). Henríquez Ureña reports that the Spanish of Veracruz and Tabasco share this unique feature (1977[162]). Likewise, Gutiérrez Eskildsen (1941) reports cases of strong and of weak aspiration in Tabasco. Weak aspiration occurs in "final plurals"[163] and strong aspiration is realized when [s] is followed by another [s][164]. Much like Caribbean

[161] In English, this means, that which separates Central Mexico from the coast of Veracruz.

[162] The reader is asked to consult pages 25-26.

[163] For example, the [s] at the end of the word "niños" in the noun phrase "los niños" (the children) (p. 28-29).

[164] For example, the noun phrase "unos centavos", pronounced [ˈunos senˈtaβos] becomes [ˈunoh henˈtaβoh] ~ [ˈuno^{h} henˈtaβo^{h}] (some cents) (p. 28-29)..The superscripted [^{h}] denotes weak aspiration and the regular [h] stands for strong aspiration.

Spanish, the segmental environments of aspiration are systematic[165], as shown by the rules below:

/s/ → [h] / __ [p, t, k], for example *Tabasco* (Tabasco) [taˈβasko] → [taˈβahko]
/s/ → [h] / __ [m, b, β], for example *mismo* (the same) [ˈmismo] → [ˈmihmo]
/s/ → [h] / __[l], for example *es lo mismo* (it is the same) [ˈes lo ˈmismo] → [ˈeh lo ˈmihmo]

Table 3.32 Aspiration of /s/.

Williamson (1986) also finds the realization of /s/ as [s] only 21% of the time. That is, 79% of the time, /s/ is aspirated[166]. When it is maintained, /s/ undergoes one of several assimilation processes. The following table summarizes these processes:

/s/ → [ʻs] / # __, especially in the word *sí* (yes), ([s] with a slight occlusion)
/s/ → [z] ~ [s] / # __, sometimes (voiced)
/s/ → [z] ~ [ᶻ] ~ [ʱ] / __ [+voice, +consonantal] (alternating with voiced, weakened voiced, and aspirated voiced)
/sm/ → [mm] ~ [mᵐ] ~ [ᵐm] ~ [ʰm] (cluster is modified to bilabial nasal geminate,

[165] The data in the table was presented by Gutiérrez Eskildsen (1941). In 1944, however, Gutiérrez Eskildsen found aspiration to occur in more constrictive environments. In this later study, the author noted that the Spanish of Tabasco does not have word final aspiration as do the coastal areas of Veracruz and Guerrero, unless the [s] is a plural marker (p.124).

[166] Please refer to Williamson, 1986, p.104.

weakened bilabial geminate, and aspiration followed by [m])
/s/ → [s̪] ~ [ˢ] ~ [h] ~ [ʰ] ~ [ʱ] / __ [t] (alternating with dentalized fricative and dentalized aspiration)
/s/ → [ø], sometimes (deleted)
Other less common variants of /s/ are: [s̈] (apical) and [θ̪] (weakened interdental)

Table 3.33 Realization of /s/ in Tabasco when the sound is maintained.

3.5.2 Sonorants

The dialect described as the Gulf and the Lowlands in this dissertation is uniquely peculiar in relation to its sonorants, especially in relation to /j/[167]. The polymorphous status of /j/ seen throughout Mexico is greatly appreciated in this region, as summarized in the table below:

The standard [j]
A relaxed [j]
A slightly assibilated [j]
A heavily assibilated [j]
An affricate [j]

Table 3.34 Variations of /j/ in Tabasco.

This vascillation between a weakened and a strengthened /j/ is noted by all investigators who have researched the area. Specifically, Gutiérrez Eskildsen reports that this realization is true for Tabasco, Campeche, Yucatán and Chiapas and that the realization of /j/ in Tabasco is

[167] The convention in the *hispanista* tradition is to use the symbol /y/ to represent IPA /j/.

that of the "anómala prepalatal fricativa[168]", symbolized as [ž] in his book (1941, p. 21). Canfield attributes a similar distribution to Oaxaca, a pronunciation that is considered "de fino hablar[169]" (1981, p. 63). The opposite realization, where the /j/ is so weakened that it disappears is also reported "entre los indígenas[170]", where words such as *gallina* (hen) [gaˈjina] and *tortilla* (Mexican corn flat bread) [torˈtija] are more commony realized as [gaˈina] and [torˈtja] (Gutiérrez Eskildsen, 1941, p. 22). In addition, /j/ may become [d] after a nasal as in *inyección* (injection, vaccination), which becomes [indeˈksjon] instead of the expected [injeˈksjon] Gutiérrez Eskildsen, 1941[171]). Alonso (1961) reports that, in Guerrero and Chiapas (along with Central America), /j/ can become "weakened", becoming [i] (p. 352). In concurrence with Alonso (1961) and Alvar (1960), Garza Cuarón (1987) distinguishes three types of fricativization of /j/: weak [yᵛ], mid [yᶾ], and intense [yᶾ̂], and says "con menor frecuencia se dan otras realizaciones de /j/[172]" (p. 46). Lastly, in one interesting sub-area of this dialectal region (Orizaba, Veracruz), Lope Blanch (1972) reports the distinction between what is orthographically represented as <ll> and <y>. This historical distinction is reportedly maintained

[168] The translation is: anomalous prepalatal fricative.

[169] The translation is: refined speech.

[170] That is, amongst indigenous people.

[171] The reader is asked to consult Gutiérrez Eskildsen, 1941, p. 22, for more examples.

[172] In other words, with less frequency one finds other realizations of /j/. The reader is asked to remember that IPA /j/ is usually transcribed as /y/ in Spanish-language scholarship.

in the pronunciation, yielding [ž][173] for <ll> and [j] for <y>. This observation is not echoed by other scholars for this or for any other Mexican dialect, however.

The realization of /n/ and /ɲ/ presented by Gutiérrez Eskildsen (1941[174]) for the area of the Gulf and the Lowlands is peculiar and is summarized in the tables below:

/n/ → [l], when it is the pronoun *nos*[175] (to us, indirect object)
/ns/ → [s] / __[+dental], for example *construcción* (construction) has the change [construˈksjon] → [costruˈksjon]
/gn/ → [nn] / __[+dental], for example *malignidad*[176] (malice) has the change [maligniˈðad] → [malinniˈðad]
/n/ → [ɲ], in some words such as *nudo* (knot), pronounced as [ˈɲuðo] instead of [ˈnuðo]
/n/ → [ɲ] / __ [i], for example *Antonio* (Antonio, proper name) [anˈtonjo] becomes [anˈtoɲo]
/n/ → [ø] / __#, for example *lantén* (from *hoja de lantén*, plantain narrow-leaf) [lanˈten] becomes [lanˈte]

Table 3.35 Realizations of /n/.

[173] The IPA symbol is /ʤ/. The reader is asked to consult Lope Blanch (1972) p. 109 for more details.

[174] The reader is asked to consult pages 23-26 for more information regarding this topic.

[175] I have observed this in other dialects, including Los Angeles Chicano Spanish.

[176] *Maldad* is the most common word in Spanish.

/ɲ/ → [ñ] / [+vocalic] __ [+vocalic] (an open allophone)
/ɲ/ → [nj] (depalatalized)

Table 3.36 Realizations of /ɲ/.

The appearance of [ŋ], as mentioned in the introduction to this section, is one of the most salient features of this area. For example, Williamson (1986) finds that /n/ is realized as [ŋ], which alternates with [^{n}] ~ [^{ŋ}] at the end of an utterance in Tabasco. Marden (1896) observes a word-final [ŋ] in Puebla, Oaxaca, and in Veracruz. Lastly, Garza Cuarón (1987) observes [ŋ] in Oaxaca[177].

Gutiérrez Eskildsen (1941) reports that the alveolar flap /ɾ/ has the following three realizations:

/ɾ/ → [l], for example, the word *interpretar* (to interpret) becomes [intelpɾe:taɾ]
/ɾ/ → [d], for example, the word *carrera* (race) becomes [ka:reða]
/ɾ/ → [ɾ̥], for example, the word *frustrar* (to frustrate) becomes [fɾusˡtɾaɾ̥]

Table 3.37 Realizations of /ɾ/ in Oaxaca.

In addition, Gutiérrez Eskildsen (1944) observes that utterance-final /ɾ/ "sufre de relajación y por último se pierde, esto sucede particularmente en los infinitivos[178]" (p. 22).

[177] Please consult Marden, 1896, p. 69 and Garza Cuarón, 1987, p. 50.

[178] The translation for this phrase is: the sound undergoes laxing and, at last, it is lost, this occurs particularly with the infinitives.

Williamson (1986) makes very different generalizations of /ɾ/ and /r/. Some of the symbols have been modified due to the limitations of the word processing system used for this dissertation.

/ɾ/	→ [*'r'*] (shorter, with less vibration)
	→ [ř] (assibilated)
	→ [ř:] (fricative, long)
	→ [r̆] (fricative, short)
	→ [r̂] (fricative and retroflex)
	→ [r̥̆] / (fricative and devoiced)
	→ [ř] / (fricative and voiced)
/ɾ/	→ [r̥̆] / (fricative and devoiced)
	→ [ˑr̆] / (fricative, weakened and devoiced)
	→ [ˇr̆] (fricative and weakened)

Table 3.38 Realizations of /ɾ/ and /ɾ/ in Tabasco.

Williamson (1986) describes the behavior of /l/ extensively. The /l/ has the expected dental and palatal realizations according to the environment. Some of the more specialized realizations of /l/, described below, are conditioned while others are in free variation[179].

[179] For more examples, please see Williamson (1986), p. 109.

/l/ → [^{l}] / [+nasal] __, for example the phrase *en la* (in the) [^{l}en la] becomes [^{l}en^{l}a] (weakened [l])

/l/ → [^{l}] / __ #, for example the phrase *azul* (blue) [a^{l}sul] becomes [a^{l}su^{l}] (weakened [l])

/l/ → [^{n}] / __ [+nasal], for example the phrase *en la* (in the) [^{l}en la] becomes [^{l}en^{n}a] (weakened [n])

/l/ → [j], for example the phrase *él se* (he + reflexive marker) [^{l}el se] becomes [^{l}éj se] (semivowel)

/l/ → [^{ɾ}] ~ [*lɾ*]
for example the word *alcohol* (alcohol) [al^{l}kol] becomes [a^{rl}kol] ~ [a*lr*^{l}kol]
(the [l] becomes a weakened flap or is coarticulated with the flap)

/l/ → [l̥] / in [tl] clusters or at the end of a word
(devoiced [l])

/l/ → [l̠]
(realized with a retracted tongue)

Table 3.39 Realization of /l/ in Tabasco.

Alonso (1961) reports that the realization of /l/ in Veracruz is like that of Cuba, where [l] alternates with [ɾ][180]. This is a peculiar observation that is not reported in other regions.

[180] The pronunciation of [l] is, "semejante a la de Cuba, [se esuchan] las siguientes formas recogidas por Ramos Duarte: *bolcelana* (< borcelana), *Agal* (< Agar) en Veracruz, donde la

3.5.3 Vowels

Eight phenomena distinguish this dialect from others in relation to its vocalic sound system. Most notable are the processes of vowel lengthening, labialization, and perservation of vowels in hiatus. The following table summarizes the phenomena reported for the region:

Vowel weakening:
[+vocalic] → [weakened] / __#, [s]__, __[s]
Vowel tensing:
[+vocalic, -stress] → [tense] / __([+consonantal])]$_{\sigma}$
Vowel laxing:
[+vocalic, +stress] → [open], especially along the coastal area.
Vowel devoicing:
[+vocalic] → [-voice] / __ [s, t, k, tʃ], and less frequently: [j̥ , p, x, d, ɾ]
Vocalic palatalization:
/a,o,u/ → [+palatal] / [+palatal], __ [e] (in hiatus), __ [+nasal]
/o/ → [+palatal] / __ [ɾ]
Vocalic Velarization:
/a/ → [+velar] / __ [k] or [k] __
Vocalic lengthening:
[+vocalic, +stress] → [+long], not very systematic
(affects all vowels except [u])

Table 3.40 Vocalic phenomena in the Gulf and the Lowlands.

pronunciación se acerca a veces a la Antillana" (analogous to that of Cuba, [one hears] the following forms collected by Ramos Duarte: *bolcelana* (< borcelana), *Agal* (< Agar) in Veracruz, where the pronunciation is close to that of the Antillas) (Alonso 1961, p. 230).

In Oaxaca, Garza Cuarón (1987) describes phenomena that are similar to other dialects of Spanish[181]. In Oaxaca, codas usually open or tense vowels, velar consonants velarize them, and palatal consonants palatalize them. Vowels are weakened when in contact with [t], [s] or word-finally. The breaking of hiatus caused by change of stress and/or change of vowel quality is prominent, as well as nasalization, and compensatory vowel lengthening.

3.5.4 Other Phenomena

The sociolinguistic influences on the Spanish of this area are organized into three general categories. First, some changes affecting the outputs of phones in the rural classes are based on purely phonological and coarticulatory influences. Second, the local Maya languages give this dialect a special flavor that affects the realizations of phonemes and/or lexemes in specific ways. Third, the use of *voseo*[182] gives this dialect a distinctive flavor.

General socially-triggered phonological and coarticulatory changes are observed in the literature: the weakening of /j/, the voicing of voiceless stops, confusion between /f/ and /x^h/, and the lengthening of vowels.

Garza Cuarón (1987) characterizes the behavior of /j/ as follows:

> ... mientras más bajo es el nivel sociocultural del hablante, más intenso y sistemático es su rehilamiento … es interesante hacer notar que las personas cultas de nivel universitario consideran el rehilamiento como índice de baja cultura; sin embargo, ellas mismas

[181] The reader can consult pages 35- 38 for further reading.

[182] *Voseo* is the use of the second person singular pronoun "vos" instead of "tú" and its appropriate verb conjugations. Some dialects have a pronominal and verbal *voseo* system (El Salvador) while others have a voseo verbal system (Chile). Salvadoran Spanish has *vos comés* (pronounced as [ko^{l}me^{h}]) instead of *tú comes* (you eat). In Chilean Spanish, *voseo* produces *tú coméis* (pronounced as [ko^{l}mei^{h}]).

> muchas veces poseen un rehilamiento suave [y^{v}], que en el habla rápida muchas veces se convierte en [y^{z}][183] (p. 46).

Young (1977) also observes this behavior.

According to Williamson, the voiceless stops can become their voiced counterparts in the speech of people of lower socioeconomic status (1986, p. 95). In opposition to this, the author notes that, in the speech of the more educated classes, "algunos informantes tenían un ensordecimiento general de secuencias fonémicas enteras [también] podemos detectar un nivel moderadamente alto de ensordecimiento, por oposición al nivel bajo de las zonas central y occidental del estado[184]" (Williamson, 1986, p. 90).

Although Garza Cuarón observes that Oaxaca has two realizations for /f/, [ɸ] and [f] that are performed independently of educational or class level, the author also reports that, for the lower classes, [ɸ]/[f] is confused with [x^{h}]. Specifically, in contexts before [w], underlying /f/ can be produced as [x^{h}] and underlying /x^{h}/ can become [f], for the illiterate classes.

In Tabasco, people who live in rural areas "lengthen vowels" (Gutiérrez Eskildsen, 1941, p. 1).

The influence of Maya is noted in the area of Tabasco. For example, the local word for *hermano* (brother) [eɾˈmano] is [ˈombe], the Maya word. Secondly, stress placement is affected

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[183] The translation is: the lower the socioeconomic status of the speaker, the more intense and systematic the *rehilamiento* … it is interesting to note that cultured people of the university level consider this trait as indexical of lower status; nevertheless, they themselves many times have a soft rehilamiento, [y^{v}], that, in fast speech gets stronger, being realized as [y^{z}]. The reader is asked to remember that [y] is IPA [j].

[184] The translation is: some informants had general devoicing of entire phonemic sequences … also we can detect a moderate level of devoicing, in opposition to the people of lower socieconomic status, of the central and eastern zones of the state.

so that the primary stress is sometimes moved to the last syllable of the word, imitating the most common Maya stress pattern.

The last sociolinguistically driven phenomenon is one of the most significant characteristics of the area: *voseo*. Gutiérrez Eskildsen explains:

> "el *voseo* … existe en el habla del campesino y del pueblo tabasqueño, en la misma forma que entre los argentinos, coincidiendo a la vez con ellos en la forma de los verbos en la segunda persona del singular (ponés, venís, podrés, vengás, alcanzás, etc.)[185]" (Gutiérrez Eskildsen, 1944, p. 36).

The investigation reports that farmer of Tabasco uses "vos" with family or close friends. Furthermore, it is noted that "vos" is often pronounced as [boh] instead of as [bos][186] (Gutiérrez Eskildsen, 1941, p. 38).

3.6 The State of Chiapas

Formal studies about the dialect of Chiapas do not exist. A few observations about this variety are sprinkled throughout the Mexican Spanish investigations. Chiapas is the crossroads between the dialect of the Yucatán peninsula, the dialect of the Gulf and the Lowlands, and the dialects of Central America. Like the Spanish of the Yucatán peninsula, the Spanish of Chiapas makes use of Maya-influenced phonological sequences. At the same time, the Spanish of Chiapas, like that of the Gulf and the Lowlands, uses *voseo.* Thus, it is difficult to include

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[185] The translation is: *voseo* … exists in the speech of the farmer of the Tabascan towns, in the same way in which Argentinean Spanish has it, concurring with them in the verbs of the second person singular (ponés, venís, podrés, vengás, alcanzás, etc.) (Gutiérrez Eskildsen, 1944, p. 36).

[186] The rule provided is: [s] → [h]/ __ [+labilal], [+dental], [+velar], or [+lateral]

Chiapas to the dialectal area of the Yucatán Peninsula or the Gulf and the Lowlands. The decision to conceive Chiapas as its own dialectal region is also guided by Lope Blanch's observations about Chiapas, "cuyas hablas coinciden en buena medida con las centroamericanas, en el empleo del voseo… y en su carácter más conservador y rural[187]" (1989, p. 88, p.145).

4. Current Research Programs on Mexican Spanish

With the purpose of accurately characterizing Mexican Spanish, this dissertation has dedicated many pages to synthesizing the vast amounts of dialectological descriptive research conducted about Mexican Spanish. As can be appreciated by the collection of facts presented above, Mexico has been a leader in dialectal research since the beginning of the last century. Studies in dialectology have been complemented by laboratory-based studies in the past three decades, a move that aligns Mexican scholarship with that of the United States.

The *Laboratorio de Estudios Fónicos*, based out of El Colegio de México in Mexico City, embodies this new vein of Mexican scholarship. In addition to phonetic and phonological studies on Mexican Spanish, an impressive body of literature on intonational phonology is also available through this research program. Intonational research will be discussed in the next three chapters (Chapter 4, 5 and 6) and will, thus, be ignored in this concluding section. In the following paragraphs, a survey of current phonological research interests will be sampled as a means to characterize this growing field. In the near future, this new wave of research will serve to update the descriptions of Mexican Spanish described in this chapter.

Serrano Morales (2006b) presents empirical work conducted about the speech of Mexico's Federal District. In comparison to Lope Blanch (1963) and Perissinotto (1975), who reported that

[187] This statement means: whose speech concurs with central-American speech in the use of the voseo … and in the most conservative rural character.

the assibilation of the flap and trill was a phonological trait that was spreading in the speech of Central Mexico[188], Serrano Morales (2006b) describes the status of /r/ and /ɾ/ based on original data and observes that, "el fenómeno de asibilación que Perissinotto (1975) sugería cómo en vías de generalización en español capitalino, se encentra en realidad en proceso de retracción, ya que ahora tenemos porcentajes menores de asibilación que en los años 1960[189]" (p. 2).

The four variants compared in Serrano Morales' work were: the trill, the flap, the sibilant trill, and the sibilant flap. Serrano Morales (2006c) concludes, "El patrón estadístico global sugiere un proceso de retracción del fenómeno, y no uno de consodilación, como sugería Perissinotto[190]" (p. 12). He also found that women and adult speakers use the assibilated variants more than others. The "linguistic leaders" (in the Labov sense; Labov, 2010) are middle-aged women who have been integrated into the class that has upward social mobility (Serrano Morales, 2006c, p.19).

Ceballos Domínguez (2006) explores the realization of /s/ in the Veracruz region. In general, she finds that the aspiration of /s/ is becoming less common, even in this region. Specifically, the author finds: "lo que se ha comprobado aquí es que está en marcha un proceso

[188] The environment triggering this change involves [t], [s], and pause.

[189] The translation is: the assibilation process that Perissinotto (1975) suggested as one that may be generalized in the Spanish of the capital, is actually losing ground now; we now have less assibilation than in the 1960's (Serrano Morales, 2006c, p. 2).

[190] This translates to: the statistic global pattern suggests a phenomenon of retraction, and not one of unification as Perissinotto suggested before.

de reforzamiento o reposición de la consonante y que este cambio no sólo está correlacionado con factores lingüísticos, con covaración muy sistemática"[191] (p. 22).

Serrano Morales (2006a) found a correlation between level of education and perceived dialectal differences[192]. The more educated the speaker, the more dialectal differences reported. In his 2006a study, Serrano Morales asked 50 Federal District speakers to label (*etiquetar*) linguistic samples in terms of stereotypes (*chilango*, *norteño*, etc.) and in terms of geographical area (Yucatán, Villahermosa, etc.). In total, the speakers in his study reported 128 labels, 83 of which had to do with stereotypes and 45 of which were geographical in nature. The most popular labels in both the stereotype and the regional group were the following:

Norteño	24%
Costeño	20%
Central	19%
Peninsular	12%
Sureste	9%
Occidente	7%
Tabasqueño	3%
Tex-Mex	3%

Table 3.41 Percentage of labels used by participants in Serrano Morales (2006a).

[191] The translation for this statement is: what is confirmed here is that there is a process of strenghthening or reposition of the consonant and that this change is not only correlated with linguistic factors, with very systematic co-variation.

[192] His speakers included people who belong to the upper class, one group with a bachelor's degree who were involved in education, and people who have less education but whose socioeconomic status was also considered high.

The participants reported that the most prestigious variety was their own, the Central Mexico variety. The least prestigious dialect was that of Nothern Mexico. Serrano Morales states, "para este grupo de informantes la variedad del centro de México es la más prestigiosa y … la del norte, por el contrario, es la menos apreciada[193]" (Serrano Morales, 2006a, p. 18). These findings are interesting because they show that language attitudes have changed very little since the inception of Mexican Spanish dialectology.

5. Conclusion

As can be appreciated by the literature review presented in this chapter, Mexican Spanish dialectology has an impressive body of research. Just as impressive, but less prominent until recently, is laboratory-based research about Mexican Spanish. Appreciating the characterization of Mexican Spanish is important for two reasons, among many. First, Mexico is home to the largest number of native Spanish speakers in the world. Second and most importantly, Mexican Spanish is the baseline Spanish variety for the fifth largest Spanish-speaking population in the world, the Spanish-speaking population of California (Villa, 2002).

[193] The translation for this statement is: for this group of informants, the central Mexico variety is the most prestigious … that of the north, on the contrary, is the least esteemed.

Chapter 4

INTONATION

1. Introduction

Whenever a person is asked to comment on how his/her speech is different or similar to that of other speakers of the same language, observations about intonation almost always arise. For example Isbasescu notes in her interviews with Cubans that those interviewed observe, "la única diferencia lingüística que distingue a los habitantes de una región de Cuba de los demás habitantes de la isla es la entonación de los orientales, que 'cantan'"[194] (1968, p. 8). Zamora Munné and Guitart write that "dentro de cada país, cada dialecto tiene su tonillo o melodía característica, hecho sobre el que suelen comentar los propios hablantes[195]" (1982, p. 134).

Added to the idea of "characteristic melody" (Zamora Munné & Guitart, 1982, p. 134), there is a general sense that certain dialects are higher pitched or lower pitched than others. For example, over many decades, Henríquez Ureña (1938, 1977) sprinkles notes on intonation throughout his publications, noting that Mexican Spanish and Argentinean Spanish are higher pitched than Colombian or other Caribbean dialects, for example.

Although early observations about Spanish intonation are, for the most part, impressionistic, they attest to the fact that intonation is real for speakers and that dialects are delineated partly by this important feature. Linguistic research about the Spanish language,

[194] The translation of this quote is: The only linguistic difference that differentiates the inhabitants of one region in Cuba from the inhabitants of another is the intonation of those of the east, who "sing".

[195] The translation of this quote is: Within each country, each dialect has its tone of characteristic melody, a fact that is usually noted by its own population.

encouraged by the fact that most popular and some scholarly descriptions of language include melody in their observations and aided by recent technological advances that facilitate the study of intonation, has recently focused on developing a system to study of intonation.

2. Early Spanish Language Intonation Research

2.1 An Overview

Formally speaking, intonation focuses on the study of speech melody, an important element of language responsible for carrying some of the semantic load of the phrase. Although Spanish intonation has been studied for some time, beginning with the impressive work by Navarro Tomás (1918), in general, the study of intonation has not enjoyed center stage in Hispanic linguistic research.

In his exhaustive study on Castillian Spanish intonation, Navarro Tomás (1918) organizes his exploration of intonational contours as summarized here: He first defines a *grupo fónico*[196] as "the segment of an utterance comprised between two pauses" (Llisterri, 1995, p. 2). Second, he defines the *unidad melódica*[197] as the shortest sentential segment with individual meaning and with a given melodic contour (Navarro Tomás, 1918, p. 37). This melodic unit is described as having three parts. First, the intonation unit is made up of the information enclosed between the first and the last stressed syllable. The last part of the melodic contour begins at the last stressed syllable and ends at the end of the group (Navarro Tomás, 1918, p. 37-41). Second, the very last part of the intonation unit can have five different tonal movements, described as *anticadencia* (rising), *semianticadencia* (half-rising), *suspensión* (level), *semicadencia* (half-falling), and

[196] This phrase is often translated as: breath-group.

[197] This phrase is often translated as: melodic unit.

cadencia (falling) (Navarro Tomás, 1918, p. 263-75). Third, the author asserts that sentences can have one or several melodic units (Navarro Tomás, 1918, p. 54).

Quilis (1981, 1993) and others have published important observations on Spanish intonation since the pioneering work of Navarro Tomás (1918). Quilis' description of Spanish intonation can be summarized as follows: A *grupo de entonación*[198], defined as the segment of an utterance between pauses, carries the phrase (1981, 1993). This *grupo de entonación* can then be divided into syllables, which are said to have an associated pitch level.

Echoing what Navarro Tomás described in 1918 and 1944, Fant (1984) uses the terminology *grupo tónico*[199] and *frase prosódica*[200] to conceptualize and describe intonation. Canellada and Madsen (1987) describe melody in terms of intonational phrases, which they term *cláusulas*[201]. López Gonzalo (1993) uses the terms *grupo acentual*[202], *palabra prosódica*[203], and *grupo entonativo*[204] to organize the components of an intonational phrase.

[198] This phrase is often translated as: intonation group.

[199] The translation is: tonic grouping.

[200] The translation is: prosodic phrase.

[201] The translation is: clauses.

[202] The translation is: accent group.

[203] The translation is: prosodic word.

[204] The translation is: intonational group or intonational grouping.

2.2 Coding Systems

The early coding systems proposed for Spanish language intonation are even more varied and disparate than the theoretical frameworks from which they originate. For example, Navarro Tomás (1944) used the following codes in his early description of Castillian Spanish:

‖‖	pause (defined as less than 1 second)
‖	pause (defined as less than .5 of a second)
|	pause (defined as less than .25 of a second)
′	pause (an almost unnoticeable break)
→	used to mark tonal inflection (the direction of he arrow codes the tone of the sybllable until a change occurs)

Table 4.1 Codes used by Navarro Tomás (1944) to describe Castillian Spanish intonation.

In 1948, Navarro Tomás increased the code system to the following:

‖	rising tone
⌉	half rising tone
⌋	half falling tone
|	level tone
;	falling tone
‖;	absolute question
⌉;	reiterative question
⌋;	pronominal and assertive question (echo-question)
⎪	relative question
|	continuation rise in interrogative sentences

Table 4.2 Codes used by Navarro Tomás (1948) to describe Castillian Spanish intonation.

To further exemplify the varied coding systems used to describe Spanish intonation since Navarro Tomás' publications, the tables bellow are included, which synthesize the coding systems presented by Quillis (1981) and Fant (1984) [205].

Final pitch movements:	
↓	falling tone
↑	rising tone
|	level tone
Pitch levels:	
/1/	low
/2/	mid
/3/	high
Stress:	
//	strong
/˘/	weak

Table 4.3 Codes used by Quilis (1981).

Five pitch levels assigned to syllables:	
M	medium
B	Low
A	High
A+	Extra high

Table 4.4 Codes used by Fant (1984).

[205] For other coding systems, the reader is asked to consult the work of Alcina and Blecua (1975), Quilis (1993), Canellada and Madsen (1987), and Garrido (1997).

As can be appreciated, a coding system based on an agreed-upon theoretical framework was pressing if Spanish intonation research was to be conducted and presented in a meaningful way. The variation in terminology, conventions used, methodological approaches, and the serious limitations imposed by the lack of acoustic studies made it difficult to study Spanish intonation and complicated comparisons across dialects. In the eighties, as a result of the many advances made possible by two decades of acoustic and auditory phonetic investigations, researchers were able to agree upon important theoretical and practical issues, embodied in the Autosegmental-Metrical (AM) theory and in the Tones and Breaks Indices coding system (ToBI).

3. The Autosegmental-Metrical Model and the Tones and Breaks Indices Framework

3.1 Overview

Since the eighties, the study of melodic structures has been guided by the Autosegmental-Metrical (AM) model. This framework provides a structured phonological description of the fundamental frequency (F0) of speech and terms the study of pitch contours *intonational phonology* (Ladd 1996). Since the AM model was first proposed, intonational phonology frameworks have had two objectives: the phonetic goal of providing a mapping of phonological elements to continuous acoustic parameters; and the phonological purpose of characterizing intonational contours in terms of categorically distinct tonal elements (i.e. high and low) and prosodic structures. Today, the mapping of phonological elements to speech and the characterization of melodic occurrences in phrases is known as the AM model. Subsequently, information about juncture was added to this framework.

The transcription convention for marking juncture and tones is known as the Tones and Breaks Indices system (ToBI). The tone part (To) is based on the AM model of intonational phonology (Liberman, 1975; Bruce, 1977; Pierrehumbert, 1980; Beckman & Pierrehumbert, 1986; and Ladd, 1983) and the juncture part (BI) is based on the studies that examined durational correlates of prosodic stucture (Silverman, Beckman, Pitrelli, Ostendorf, Wightman, Price, Pierrehumbert, & Hirschberg, 1992; Pitrelli, Beckman, & Hirschberg, 1994; Price, Ostendorf, Shattuck-Hufnagel, & Fong, 1991; and Wrightman, Shattuck-Hufnagel, Ostendorf, & Price, 1992).

3.2 English ToBI

The Mainstream American English Tones and Breaks Indices system (MAE_ToBI), based on all the aforementioned investigations, was the first ToBI system proposed in the literature. As such, it is used as the foundation for the development of subsequent ToBI systems. Ladefoged's 1992 description of intonation serves to exemplify the way in which English intonation was generally described in the literature before ToBI was formalized. Intonation was presented as juxtaposed chains of rise-fall-rise sequences (Ladefoged, 1992, p. 99). That is, descriptions of intonation about English described it as "holistic shapes instead of breaking them down into … different types of tone(s)" (Beckman and Helam, 1997, p. 39).

Since the first ToBI system was introduced, the term ToBI has been used in two distinct ways in the literature. The term was originally used to describe the annotation system reconciled for Mainstream American English (Beckman, Hirschberg, and Shattuck-Hufnagel, 2005). The original application of the coding system proposed by Beckman and Hirschberg in 1994 was for the melodic patterns of Mainstream American English (MAE) but, since it was the first, the

system was simply called ToBI. However, before long, ToBI "came to refer to a general framework for the development of prosodic annotation systems in other varieties of English and in other languages" (Beckman et. al, 2005, p. 9). Thus, MAE_ToBI is now used to term the original system for English.

MAE_ToBI was developed by engineers, psychologists, computer scientists, and linguists with different but converging agendas. These researchers met over four workshops to agree upon a tagging system that could help them code melodic contours reliably and efficiently. At the conclusion of the ToBI research group meetings, the following five conclusions were made: First, the annotation system was projected onto separate tiers, reflecting the fact that tones and breaks act independently. Second, melodic patterns were broken down into low, high, and bitonal targets, signaling the actual physicality of the tune. Third, pitch range was said to be independent of tone level, marking the local pitch range in terms of either upstepped or downstepped excursions. That is, the overall range of the fundamental frequency (F0) determines what was meant by high (H) or low (L) as each value is relative. Fourth, two types of tones were proposed: pitch accents and edge accents. The former is associated with the prominent syllables within a word and the latter is aligned with the edge of phrases. Lastly, edge tones were determined to be either intermediate phrase tones or intonation phrase tones (Beckman et. al, 2005).

At the tones level, MAE_ToBI as well as subsequent models for other anguages usually include two very important components: a coding of the melodic patterns, which are understood to be sequences of relative high and low tones (coded as L, H and LH, HL sequences[206]), and a way to specify tonal alignment to the text and contour (coded as *). The tones that appear at

[206] These are coded with a "+" sign, which is used to combine the sequences (for example, L+H or H+L).

particular syllables within a word are termed pitch accents while those that appear at the edge of phrases are called phrase accents or boundary tones. Accent and stress, in this system, can correlate but are not necessarily one and the same since, in languages such as English, a syllable can be stressed without having a pitch accent. When the pitch accent is composed of two tones, only one of the two tones is directly aligned with the stressed syllable and the other tone either precedes or follows this stressed syllable. This associated tone is the starred tone and is coded as H* or L* in the sequences H*+L, H+L*, L*+H, and L+H*, for example. Phrasal tones are associated with the right edge of a phrasal unit and are usually understood to be intermediate phrase tones (marked by adding "-" to H or L) or intonation phrase boundary tones (marked by adding "%" to L or H). The intermediate phrase accent groups words into stretches of speech that have at least one pitch-accented syllable and that end with a disjunction felt to be bigger than that between words but smaller than that of the end of a sentence or intonation phrase. When there is more than one accent in a phrase, the last pitch accent is felt to be the strongest accent or tone and it is called the nuclear pitch accent. Boundary tones are tones that mark the edge of a prosodic unit, called the intonation phrase (Beckman et. al, 2005).[207]

To summarize, a complete report of ToBI as has been presented for English and other languages includes the following necessary items: an audio recording, a record of the fundamental frequency (F0) contour, a transcription of the tones (in the Tone-tier), an orthographic transcription of the words, a numeric code of juncture, and a miscellaneous tier that allows for comments such as disfluency, etc.

[207] It is important to note that intermediate phrase tones (coded as L- or H-) are debated in the literature, whereas boundary tones (coded as L% and H%) are concurred upon by all research programs.

The information that is coded in the Tone-tier includes:

- The phrase accents H- (and its downstepped counterpart !H-) and L-.
- The boundary tones H% and L%, and the pitch accents. For English, these are L*, H* (and its downstepped counterpart !H*), L+H* (and its downstepped counterpart L+!H*), L*+H (and its downstepped counterpart L*+!H) and H+!H*.
- The tone tier can also mark uncertainty (labeled as *?, -?, %?, X?, X-?, X%) and phonetic events such as delayed peak (<), HiF0 (maximum F0 associated with H of an accent within an intermediate phrase), and restart (%r).

The Break Indices tier marks the following:

- The numeric code of juncture, which is summarized by the following codes: 0 (inter-word juncture), 1 (juncture between words), 2 (mismatch), 3 (intermediate phrase juncture), and 4 (intonational phrase juncture).
- The mark "-" next to any of the aforementioned numerical codes denotes uncertainly.
- "p" next to any of the aforementioned numbers denotes perceived hesitation.

3.3 Other ToBI Systems

Success in applying the AM model to Japanese (Beckman and Pierrehumbert, 1986; Pierrehumbert and Beckman, 1988), Swedish (Bruce, 1977), and Korean (Jun, 1996), was regarded as an open invitation for other research teams to develop applications of this system that would account for the intonational systems of other languages. The original ToBI framework has been applied to a number of languages partly because there is an explicit separation between the autosegmental tonal makeup of a phrase and the metrical structure of the phrase, which is

useful in melodic descriptions across languages. As can be expected, however, researchers have had to use adapted versions of the original ToBI to describe other languages. For example, C_ToBI (Cantonese ToBI) adds a foot tier in order to account for syllable lenition in the language (Wong, Chan & Beckman, 2005). Jun (1996) proposes a phonetic tier to account for mismatch between the underlying tones and the surface tones in Korean.

3.3.1 Spanish Language ToBI Systems

Some scholars have proposed descriptions for intonational patterns of Spanish within the AM model, using modified versions of the original ToBI coding system[208]. Beckman, Díaz-Campos, McGory, and Morgan's 2002 article[209] was the first formal attempt to create a Spanish ToBI (referred to as Sp_ToBI in the publication). The proposal was envisioned as an ongoing project to describe multiple varieties of Spanish. This Sp_ToBI model is based on data from Venezuelan and Peninsular Spanish. Following what had been proposed for English, their Sp_ToBI utilizes tiers for prosodic transcription. The tiers used in this system were: words, syllable (Syl tier), break indices, tones, miscellaneous (Misc tier), and code tier. The symbols used to code in these tiers are summarized below in Table 4.5.

[208] Unfortunately, while the melodic contour of many varieties of Spanish has been studied, differences within dialects are generally not reported. This is problematic because, as Labov (1996) and other scholars show, there are strong correlations between linguistic variables and social categories (e.g. region, socioeconomic class, gender, class, and age) of dialects. Thus, as will be shown in the present dissertation, the study of the dialect is improved by selecting speakers without many categorical differences.

[209] The article is titled *Intonation across Spanish, in the Tones and Break Indices framework* (Beckman et al., 2002)

Three Pitch Accents:

L*+H, late rising accent, with peak after the stressed syllable and valley toward the beginning.

L+H*, early rising accent, with peak during the stressed syllable.

H+L*, a clear fall from a preceding higher pitch onto lower pitch during the stressed syllable, starting at about the rhyme onset.

"Place Holders" (used when pitch accent is difficult to identify):

H*, a clear small peak during the accented syllable.

*, used when the pitch shape is too ambiguous, but there is a perceived pitch accent.

Upstep or Downstep is marked by:

L*+!H, downstepped variant of L*+H.

L+!H*, downstepped variant of L+H*.

¡L+H*, upstepped variant of L+H*.

Boundary Tones:

L%, fall to a lower F0 after L+H*, etc., or maintenance of a low F0 after H+L*.

H%, rise to a higher F0 after any accent.

M%, half rise or mid-level plateau after a L+H*, H*, etc. This is used in order to "not choose prematurely between ¡L% and !H%."

Table 4.5 Summary of Sp_ToBI coding conventions presented by Beckman, et al. (2002).

Since Beckman et al. (2002) first proposed this system, research programs applying this framework to Spanish include "careful phonetic studies of peak alignment and scaling (e.g. Prieto et al., 1995) and a comprehensive catalog of tunes (in the AM sense of the term) in several major New World and Peninsular varieties (Sosa 1991; Sosa 1999)" (Beckman et al., 2002, p. 10). Other systematic analyses of the intonational system of Spanish, based on this initial

framework, are Face (2001), Hedberg and Sosa (2002), Nibert (2000), Prieto et al. (1995), Prieto (1997, 1998, 2004), Prieto and Hirschberg (1996), Prieto, Nibert and Shih (1995, 1996), Prieto, Shih, and Nibert (1996), Prieto, van Santen, and Hirschberg (1994, 1995) and many others.

Although the ToBI system has served to unify analyses about Spanish intonation, researchers have debated some aspects of the intonational phonology of Spanish. The analysis of intermediate phrase boundaries presents an unresolved theoretical issue in the literature, for example. Intermediate phrase boundaries, are used to denote a unit that is larger than a word but smaller than an utterance. Intermediate phrase boundaries are a convention widely used in the ToBI model for English and other languages (e.g. Greek) that has been effective in describing and marking contours in these languages (Arvaniti and Baltazani, 2005). For Spanish, Hualde, Prieto, and Nibert, and others, argue that intermediate phrases are necessary (Hualde, 2002; Prieto 1997, 1998, 2004; and Nibert, 2000). Nibert (2000), for example, found statistically significant results when she asked Peninsular Spanish speakers about the contributing meaning of intermediate phrase boundaries. On the other hand, Beckman et al. (2002), Sosa (1999), and others argue that there is no substantial evidence for this constituent[210]. The present dissertation does not present an analysis that can help resolve this issue.

All scholars who have focused on Spanish report that pitch accent (also referred to as pre-nuclear pitch accent) is linked to the stressed syllable of a word and that the last pitch accent of the intonational phrase is the most prominent pitch accent, appropriately termed the nuclear pitch accent. However, researchers have not agreed in their characterization of the pre-nuclear and the

[210] As does Beckman et. al (2002), this dissertation presents an index inventory that allows for "a possible intermediate level" (Beckman et al., 2002) without marking an intermediate phrase. That is, "3" is included to mark pauses that are bigger than word-level pauses but smaller than sentence-final pauses. That way, if intermediate phrase boundaries are found in the future, the present system can subsequently code them with minimal effort.

nuclear pitch accents in Spanish. This presents another general debate in relation to Spanish intonational studies. Essentially, the inventory of pre-nuclear and nuclear pitch accents differs in each account of Spanish intonation. The Mexican and Chicano Spanish data presented in this study will also evidence different inventories for each variety.

The nature of the boundary tone is also disputed in the literature so that some scholars embrace a binary system of low and high boundary tones while others describe Spanish as having low, high, and mid boundary tones. The boundary tone is the tone associated with the end of an intonational phrase. The Sp_ToBI of Beckman et al. (2002) includes a low and high boundary tone (L% and H%) as well as a mid-level boundary tone (M%), in order to differentiate half rise (boundary tones that are at the middle of the F0 range) from full rise (boundary tones that are at above the middle of the F0 range). In the future, more studies based on naturalistic data may provide evidence to favor an alignment with the observations made by Hualde (2002), Prieto (1997, 1998, 2004) and Nibert (2000) or with those of Beckman et al. (2002) and Sosa (1999). The Mexican Spanish data analyzed in this dissertation supports that boundary tones are either L% or H% while the Chicano Spanish data provides evidence for M%, L% and H% boundary tones.

Lastly, not all scholars have proposed phonologically driven F0 events. A critical question in some of the literature is whether there are phonologically triggered changes to the melodic contour. In other words, can some of the tones found be predicted or derived by rule or are they truly phonetic? Prieto et al. (1995) affirms there is "evidence that both the segmental composition of the accented syllable and following prosodic context trigger a timing and velocity adjustment" (p. 7). In this study, cases of "strict stress clash" (where there aren't any syllables

separating two tones) provided tone clash resolutions[211] where the speakers "can choose [a] clash-resolving strategy" (Prieto et al., 1995, p. 7). Other researchers such as Sosa (1991) are more conservative in their presentation of the data, marking differences in the physicality of the tune phonetically.

4. The Present Investigation

Before embarking in a detailed discussion of Los Angeles Chicano Spanish intonation, some preliminary discussions should be presented.

First, the question of whether the ToBI framework is even adequate to study Los Angeles Spanish should be answered. Sosa (1991) presented his analysis of a variety of intonational contours of Argentinean (Buenos Aires), Puerto Rican (Santo Domingo), Mexican (Mexico City), Venezuelan (Caracas) and Colombian (Bogotá) Spanish. His informants included a male and a female speaker of each of these dialects and included an analysis of declaratives, yes-no questions, and wh-interrogatives. At the time of Sosa's publication, ToBI had not been proposed yet, however Sosa was able to show that Pierrehumbert's 1980 model was a useful tool for exploring melodic contours of the Spanish language.

Second, the already presented question as to whether there is a Los Angles variety to be studied must be addressed. This investigation sets out to categorically show that this variety of Spanish, termed Chicano Spanish in this dissertation, is a dialect in its own right, as defined by its melodic blueprint. The participants in the study are assumed to belong to one linguistic community as they "share[...] norms for interpretation or use of language" (Santa Ana, 1991, p.

[211] One speaker's strategy was to delete one of the two accents while, the others tended to "overlap the two underlying gestures, resulting in a rising – falling gesture with only one peak " (Prieto et al., 1995).

13). Extending Labov's 1972 observations to the query in hand, it can be argued that, to the extent that Los Angeles Spanish speakers do not participate in the production and reproduction of their Mexican or Salvadoran baseline, Chicano Spanish speakers belong to a separate speech community. In fact, as noted in the introductory chapter, some scholars have described the population of Los Angeles Chicanos/as as a separate speech community from other Spanish-speaking communities (Wald, 1981; García 1984; Santa Ana, 1991, and Parodi and Santa Ana, 1997).

Research programs on intonational phonology admit that much work is needed before any given Sp_ToBI "can become the standard communal resource that some of the older ToBI systems already are" (Beckman et al., 2002). The present dissertation, therefore, wishes to add to the body of research on Spanish by investigating some aspects of the intonational phonology of Los Angeles Chicano Spanish. The analysis of the melodies of Chicano Spanish in this dissertation will spring from a study on Mexican Spanish, the Chicano Spanish baseline, to which we now turn.

Chapter 5

MEXICAN SPANISH INTONATION

1. Introduction

The study of Mexican Spanish intonation is new to the field of laboratory linguistics. Partial studies on Mexican Spanish intonation have described a variety of intonation contours from a phonetic and a phonological point of view[212]. A comprehensive review of the intonational contours of any one Mexican dialect had not been presented until de-la-Mota, Butragueño, and Prieto's "Mexican Spanish Intonation" (2010). This study is a comprehensive analysis of Mexico City's Spanish intonation[213].

Most of the Mexican immigrants to Los Angeles do not have direct roots to Mexico City, however. In fact, as mentioned in Chapter 1, "it can be asserted with reasonable certainty that rural Jaliscan is the Spanish-dialect baseline for California Chicanos" (Santa Ana, 1991, p.18). Specifically, the area called Los Altos is home to most immigrants to Los Angeles (FitzGerald, 2009).

To address this fact, this chapter manages two complementary objectives. First, comparisons are made between Los Altos and other Spanish dialects. Second, Los Altos or Alteño Spanish intonation is presented in light of a brief but focused study. This will serve as the intonation baseline by which Chicano Spanish intonation will be explored in the next chapter.

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[212] For example, Matluck, 1951; Kvavic, 1974, 1979; Sosa, 1999; Prieto et al., 1995; Ávila, 2003; Beckman et al., 2002; and Velázquez 2008.

[213] Using the Sp_ToBI labeling conventions proposed by Beckman et al. (2002) and based on the proposals put forth in Face and Prieto (2007) and Estebas-Vilaplana and Prieto (2008), the aforementioned research team presented an inventory of nuclear pitch accents and boundary tones found in Mexico City's Spanish.

2. Early Studies on Mexican Spanish in the ToBI Conventions System

Since MAE_ToBI was first introduced, important studies have been published about Spanish intonation. In this section, the tone inventories found in these studies will be summarized.

According to Prieto et al.'s early study of Mexican Spanish, the monotone H* characterizes the pre-nuclear pitch and nuclear pitch accents of the dialect (Prieto et al., 1995). Sosa's description of Madrid's Spanish found the pre-nuclear pitch accents to be H*+L, L*+H, and L+H* and the nuclear pitch accents to be L+H*, H+L*, H+H*, L*, and H* (Sosa 1991, 1999). Face's research proposes that Madrid Spanish has both L*+H and L+H* (Face 2001). Hualde (2002) analyses Peninsular Spanish and concludes that L+H* is the tone that is most representative of the dialect. Nibert's research presents data from Peninsular speakers and presents an inventory which has L*+H as the pre-nuclear pitch accent and L+H*, H* and H+L* as the nuclear pitch accents (Nibert 2000). De-la Mota et al. (2010) found the monotonal accents L* and H* and the bitonal pitch accents L+H* (as well as L+>H*), L*+H, and H+L*.

3. Jalisco Mexican Spanish: Alteño Mexican Spanish

3.1 Background

Alteño Spanish is spoken in the Los Altos region of Jalisco, Mexico. Jalisco is bordered by the Pacific Ocean to the west, by the states of Nayarit and Zacatecas to the north, by the state of Guanajuato to the east, and by the states of Colima and Michoacán to the south. The Los Altos, Jalisco region refers to a geographic region that includes Guadalajara, the second most populous city in Mexico.

The Alteño dialect is noticeably different from the standard Mexican dialect spoken in Mexico City and is easily identified as such by other Mexican speakers and researchers (Boyd-Bowman 1960; Cárdenas 1967; Lope Blanch 1993). As in the case with other varieties of Spanish, there is a standard as well as other socially marked dialects of Alteño Spanish (Henríquez Ureña 1938; Matluck 1951). Because social markers are expressed in the intonational system, the present chapter is a study of the intonation of the rural and working classes of this area, which is where the first wave of twentieth century Mexican immigrants moving to Los Angeles came from (Santa Ana, 1991, p. 18).

In the figure below, the Alteño region appears as a circle within the state of Jalisco.

Figure 5.1 Map of Mexico showing the Los Altos region, also known as the Alteño region.

3.2 Consonantal System

As explained in detail in Chapter 3 of this dissertation, the Jalisco region is characterized by a very conservative realization of its consonants and vowels. The phonemic system of Alteño Spanish includes five vowels and seventeen consonants. The consonants include voiced and

voiceless plosives: /p/, /t/, /k/, /b/, /d/, /g/; nasals: /m/, /n/, /ɲ/; the trill: /r/; the flap: /ɾ/; fricatives: /f/, /s/, /x^{h}/[214]; the lateral: /l/; the affricate: /t͡ʃ/; and the glide /j/. The following chart includes all the sounds reported in the research for this region. Phonemes are represented in / / and allophones in [ ].

	bilabial	labiodental	interdental	dental	alveolar	palatal	velar	glottal
stop voiced voiceless	/b/ /p/			/d/ /t/			/g/ /k/	
nasal	/m/	[ɱ]			/n/	/ɲ/	[ŋ]	
fricative voiced voiceless	[β] [ɸ]	/f/	[ð]		[z] /s/		[ɣ] /x^{h}/	
affricate voiced voiceless						/t͡ʃ/		
glide						/j/	[w]	
lateral					/l/			
trill					/r/, [r^{s}]			
flap					/ɾ/, [ɾ^{s}]			

Table 5.1 Consonant sounds of Alteño Spanish.

/p, t, k/ is realized as [p, t, k] and /b, d, g/ is usually [β, ð, ɣ] as in all other Spanish dialects. In Jalisco, word finally, /t /is commonly deleted. Consonant clusters are generally maintained by those with more schooling and are reduced by those with less education. /f/ is realized as [ɸ] ~ [f]. When /s/ is surrounded by sonorant sounds, voicing occurs ([z]). No cases of loss of word final /s/ are reported by in the literature. /s/ can be realized with a nasal resonance or "resonancia nasal", which is a nasal coarticulation (represented as [s^{n}]). /t͡ʃ/ is always

[214] This sound is a softened version of the Peninsular sound [x]. The softened version is the only realization of this sound in Alteño Spanish and, thus, will be phonemically and phonetically represented as /x^{h}/ and [x^{h}].

maintained. /j/ in this region is very stable so that the affricated version of this sound is very infrequent and “rehilamiento” (weakening) is also not very common. Nasals are realized with a rigorous coarticulation, as expected. The phoneme [n] can be deleted in the cluster [ns].

Some realizations of the flap /ɾ/ and trill /r/ are interesting. Strident versions of the flap and trill (which are produced with the tip of the tongue curled, which creates some frication and devoicing), transcribed as [ɾ^{s}] and [r^{s}] (or as [r̝̊] and [r̝̊]) in this dissertation, are notably common. The quality of [ɾ^{s}] and [r^{s}] is much more like that of a strident than of a flap or trill. These realizations of the flap and trill have been identified in other dialects such as Argentinean, Costa Rican, and Chilean Spanish (Canfield, 1982; Parodi personal communication).

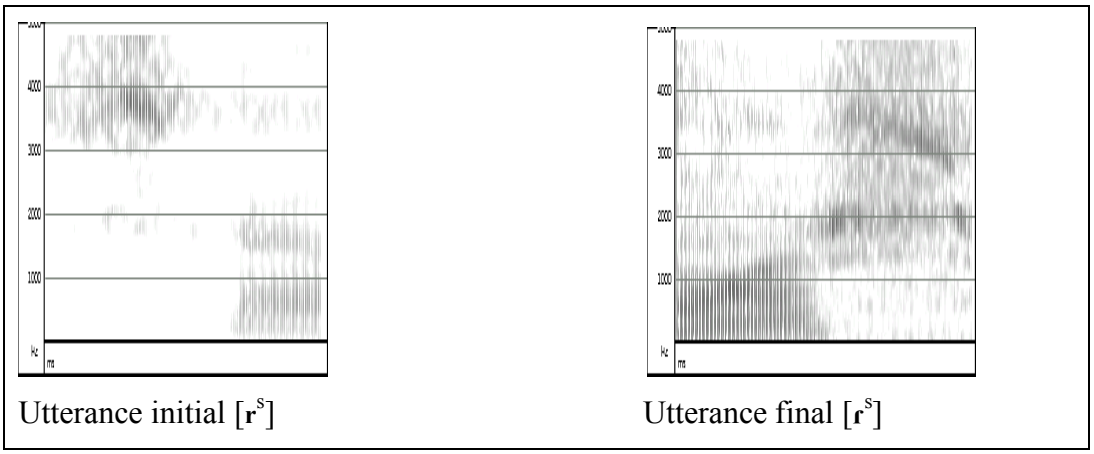

Figure 5.2 Two spectrograms showing the different realizations of the strident trill and flap.

3.3 Vocalic System

The vocalic system of Spanish includes the vowels: /a/, /e/, /i/, /o/ and /u/. Among these, the two mid vowels /e/ and /o/ have the allophones [ɛ] and [ɔ] respectively, especially in

syllables ending in [ɾ]. Stressless vowels are generally maintained[215], which is very unique in comparison to other Mexican dialects. Vowel-raising of mid vowels occurs after [t͡ʃ], giving this area a regional flavor recognized throughout the country. Below is a traditional vowel chart for the area.

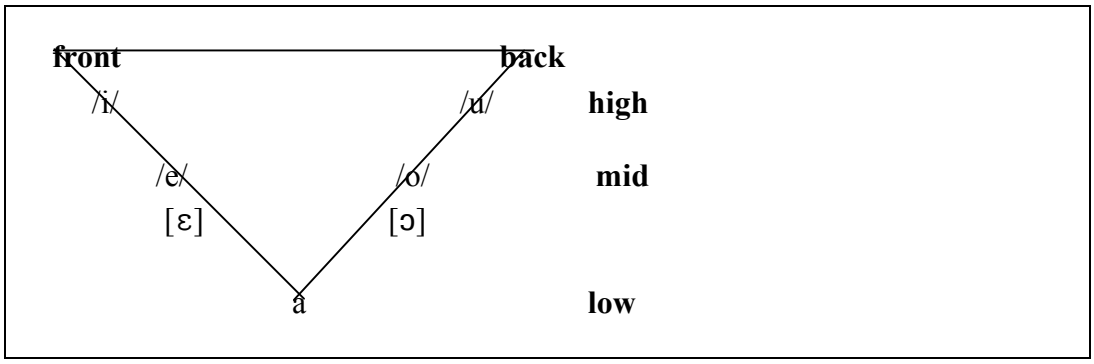

Figure 5.3 Vowel sounds of Alteño Spanish.

3.4 Socially Triggered phenomena

A few sociolinguistic features set this dialect apart, features that can be appreciated in Chicano Spanish. This section will highlight the most commonly seen socially triggered features.

/f/ becomes [h] for some speakers, especially in fast speech and among the illiterate. The historical sound [h] in words with orthographic <h>, yielding words such *huír* (to flee) with the pronunciation [huˈiɾ] instead of the standard [uˈiɾ], is reported in this area among farmers and ranchers. In casual speech of the less educated classes, the use of an epenthetic [g] at the beginning of a word as in the word *hueso* (bone), pronounced as [ˈgweso] instead of [ˈweso] is appreciated. In addition, for these same speakers, the vowels of syllables ending in a nasal consonant are heavily nasalized. Furthermore, there is a tendency to produce an epenthetic [n] at

[215] "la pérdida completa […] es rara en Jalisco" (complete loss [...] is rare in Jalisco) (Cárdenas, 1967, p. 16).

the end of syllables (for example, *céllense* (be quiet) [ˈkajense] becomes [ˈkajensen]). The dialect is characterized by a process of "nasal resonance" after [s] that appears at the end of words in the speech of the working class, changing words like *pues* (then) [ˈpwes] to [ˈpwesⁿ], for example. Lastly, the realization of /d/ is a socioeconomic marker in the dialect: /d/ can become [l] in the pronunciation of the working class while it becomes highly fricativized ([ð]) at the end of words in the educated classes. The use of [v] as an orthographically triggered hypercorrection found in the literary classes of other areas does not exist Jalisco[216].

The realization of vowels can also be socially dictated. Most importantly, diphthongs are monophthongized and monophthongs are diphthongized in the less educated classes. The diphthongs in *autoridad* (authority) [awtoriˈðað] and *paciencia* (patience) [paˈsjensja] can become [otoriˈðað] and [paˈsensja]. The monophthongs *leon* (lion) [leˈon] and *cae* (he/she falls) [ˈkae] can become [ˈljon] and [ˈkaj]. Lastly, switching the elements of a diphthong so that words such as *ciudad* (city) [siwˈðaᵟ] become [sujˈðaᵟ] is also commonly seen.

3.5 Stress

Spanish has a mixed stress system. The majority of Spanish words have penultimate stress. But, Spanish also utilizes phonemic stress extensively to differentiate between words. All stressed syllables are longer in duration and greater in amplitude than unstressed syllables (Moreno de Alba, 1994).

Words illustrating the phonemic status of stress are provided in the table below.

[216] "no hay preocupación ninguna por la [v] labiodental" (there isn't the slightest thought given to the labiodental [v]) (Cárdenas, 1967, p.28).

[ˈkan ta ɾa]	*cántara*	large unit of liquid storage[217]
[kan ˈta ɾa]	*cantara*	third person singular subjunctive of 'to sing'
[kan ta ˈɾa]	*cantará*	third person singular future of 'to sing'
[de ˈpo si to]	*depósito*	deposit' (noun)
[de po ˈsi to]	*deposito*	first person singular present of 'to deposit'
[dẹ pọ sị ˈto]	*depositó*	third person singular preterite of 'to deposit'

Table 5.2 Sample words in Spanish exemplifying phonemic stress.

3.6 Syllables

In Alteño Spanish, like in all varieties of Spanish, there are important phenomena at the syllable level. This section highlights the four most important for the dialect. This is very important as syllable boundaries are not always realized where expected, changing the alignment of the pitch accents with the phrase and, in turn, the melodic contour.

The ideal syllable in Spanish is consonant-vowel, or CV. The sequence VCV is generally syllabified as V**.**CV**.** and VCCV is syllabified as VC**.**CV**.** The only cases where the preferred syllabification is V**.**CCV is with an obstruent-liquid cluster as in the word *hablar* (to speak) [a**.** ˈblaɾ] and *libro* [ˈli**.** bɾo] (book). In Spanish, a sequence of two vowels across a word boundary is realized as a single syllable (see 1 below). In addition, word-final consonants are realized as onsets instead of codas if the following sound is a vowel (see 2 and 3 below). These facts affect

[217] A *cántaro* (masculine) is a small ceramic vase while a *cántara* (feminine) is a large ceramic unit to hold large quantities of liquid, usually water. Both words exist in Alteño Spanish.

tone-syllable alignment since the underlying number of syllables is not always the same as the surface number. The table below shows an example of resyllabification across word boundaries resulting from coalescence. In the sentence below, the underlined segments are instances where coalescence and resyllabification occurs. The dots represent syllable boundaries.

Ma.rí<u>a a</u>l.mu.ra. de. la. lu.na. no.<u>s o</u>.fre.c<u>e a</u>.mor. **1** **2** **3** [ma.ɾj<u>a a</u>l.mu.ɾa. ðe. la. lu.na. no.<u>s o</u>.fre.s<u>e a</u>.moɾ.] (Maria Almura de la Luna offers us love)

Table 5.3 Sample sentence showing resyllabification across word boundaries.

Onset and coda consonant clusters are dispreferred so that a word like *obscuro* (dark) [obs'kuro] or *exacto* (exact) [ek'sakto] are often pronounced like [os'kuro] and [e'sakto].

Utterance final vowels, and sometimes the entire final syllable, are often devoiced. Sometimes, they are creaky (depending on the speaker, the length of the sentence, and other factors). This makes the F0 excursion (the pitch track) hard to see. As in the case of resyllabification above, this may create differences between what is expected or underlying and the surface realization of the utterance.

The strident-like realization of the flap and trill, especially at the end and at the beginning of utterances, affects the quality of the entire syllable, making the F0 excursion hard to see on the pitch track. The reader is asked to refer to section 3.2 above for more information on this phenomenon.

4. Methodology

4.1 Data Collection

The Mexican Spanish data analyzed in this chapter will serve as a point of reference when defining Chicano intonation. The intonational model of Alteño Spanish presented in this chapter is based on data gathered from four native Alteño speakers. Three female speakers and one male speaker of Alteño Spanish participated. These speakers ranged from thirty to sixty-one years of age a\nd were born and lived in the region of Los Altos from birth to at least age thirty. Their highest level of education in Mexico for all four speakers was high school. The participants defined their families as working class and rural Alteño families. Their formal education in the United States was also very limited (some English as a second language classes). Only one speaker identified as bilingual (Spanish-English). The participants reported using Spanish over ninety percent of the time in their day-to-day interactions.

One hundred sentences were recorded using a Sony MP3 IC digital recorder and were analyzed using PitchWorks (Sciconrd), a speech analysis program. Broad and narrow focus declaratives, yes-no questions, echo questions, and wh-questions were recorded. Naturalistic data was also recorded for later analysis.

The data was elicited in two ways: first, an informal conversation was recorded between the speakers and the author. Second, target sentences were elicited. The participants were provided with a list of sentences to read as answers to questions or scenarios that the author presented. The author also provided background information for each scenario. The speaker read each sentence ten times. The first two and the last two tokens of each sentence were not analyzed. When helpful, the data analyzed by the author for her 2000 M.A. thesis was consulted and will be reproduced here. Unless stated, all data analyzed in this dissertation is new.

4.2 The Coding System

As in Beckman et al. (1997, 2002), the data used for this study was coded in tiers. This allows the investigator to deconstruct the intonational contour into local discrete units. In this way, it is easier to appreciate how tones are linked to specific events in the phrase, including the stressed syllable or the end of the phrase. The present study proposes six tiers: The tone tier, the syllable tier, the word tier, the breaks tier, the miscellaneous tier, and the English tier. Below, what is coded in each of these tiers is explained.

4.2.1 The Tone Tier

The basic tonal unit is conceived as high (H) or low (L) tone or as a combination of these two tones (HL, LH). Individual monotones or bitones shape the tonal movement or contour of the sentence. These are associated with the stressed syllable. This association is expressed by the use of an asterisk on the tone (*). The tones of the pre-nuclear pitch accents (all tones except for the last tone) and nuclear pitch accents (the last pitch tone, which is the most prominent tone in Spanish) are transcribed in the tone tier. The pitch accents or tones coded here are aligned with the end of the stressed syllable.

After analyzing the data, this dissertation proposes that the most common pre-nuclear and nuclear pitch accent in Alteño Spanish is the bitone L*+H (along with its downstepped allotone L*+!H). Other tones are also found (see Results section below). Phonologically driven effects are proposed for this Mexican variety. This has been found for other languages such as Korean (Jun, 1996). Specifically, syllabification, the actual phonetic realization of segments, and the separation or closeness between stressed syllables in the phrase, all affect the surface

realization of tones in Los Altos Mexican Spanish[218] so that the expected L*+H (or L+!H*) is not always the surface tone.

The following is a summary of the preliminary coding system proposed to understand intonation:

L*+H This symbol is used when the stressed syllable shows local minimum of the F0 contour (L*) while the peak is manifested on the following syllable or syllables. This is the most common pitch accent found in this language variety. The second most common tone is its downstepped version: L*+!H.

L+H* This code is used when a stressed syllable shows an F0 peak (H*) and is preceded by a low tone (L) in the F0 contour.

The basic difference between the L*+H and L+H* bitone has to do with the alignment of the tonal valley and tonal peak and the stressed syllable. In the first case (L*+H), the H is realized after the stressed syllable is completed whereas, in the second bitone (L+H*), the valley and peak are finished during the tonic syllable.

[218] For example, a phrase such as *lo encontré* (I found him/it) [lo eŋkonˈtɾe], syllabified as "lo-en-con-tre" very often becomes [lweŋ konˈtɾe], syllabified as "loen-con-tre" in many varieties of Mexican Spanish, including the variety under scrutiny. These surface-level changes can trigger pitch changes.

H* This symbol is used when the stressed syllable shows a F0 peak but is not preceded or followed by a low F0 (other than the expected pitch downtrend). This is most common either at the end of sentences (as the nuclear pitch accent) or at the beginning of a sentence, where phonological material allowing the L tone to be manifested is missing. A downstepped version of this monotone, !H*, is also commonly seen.

L* This code is used when the stressed syllable shows an F0 value that is lower than the preceding F0. This is most common in questions with focus, where the L* works against the expected pitch uptrend.

Edge tones are those that occur at the end of the utterance, called boundary tones in this dissertation. These occur independently from the tonic syllable. The following are the codes utilized in this analysis to code what happens between the nuclear pitch accent and the end of each intonational phrase:

L% This represents an F0 minimum realized on the word-final syllable of an intonational phrase (thus, pause occurs following this tone). The intonational phrase is the largest prosodic unit proposed in this analysis. Pitch reset occurs after boundary tones.

M% This symbol marks an F0 that is realized as neither high nor low on the word-final syllable at the end of the intonational phrase (thus, pause occurs following this tone). After this, pitch reset takes place. This boundary tone was not realized in the Mexican Spanish data but was very commonly used in Chicano Spanish.

H% This symbol marks an F0 maximum realized on the word-final syllable at the end of the intonational phrase (thus, pause occurs following this tone). After this, pitch reset takes place.

! This is used to denote a "downstep" or lowering in the F0 peak. All pitch accents can be downstepped in theory (except for the L* tone). The downstepped high tone is perceived to be high but appears lower than the previous high tone in the pitch track due to natural declination. All pitch accents are generally downstepped in neutral declarative sentences after the initial pitch accent.

^ This code is used to denote an "upstep" in the F0 peak. All of the pitch accents mentioned earlier can be upstepped (except for the L* tone). The upstepped high tone is perceived to be higher than the previous high tone. "^" is represented as "¡" in some ToBI descriptions, including Beckman et al. (2002).

( ) Parenthesis are used to denote the presence of pitch accents that are not seen physically in the F0 track but that are perceived by the researcher. There are many instances, most commonly sentence/utterance finally, where the pitch track is lost due to devoicing, creakiness or pitch-range narrowing. In addition, the pitch track can misrepresent the real contour due to pitch halving or doubling. Thus, this is an important coding mechanism.

> This notation is used to denote a delay in the realization of the tone. It is expected that the pitch accent will align with the stressed syllable. When this doesn't take place, this symbol is used. This notation is also used to mark a sustained tone (a tone that is maintained over more than one syllable).

4.2.2 The Syllable Tier

The literature published to date on Spanish intonation affirms that all content words in Spanish carry stress and all stressed syllables carry pitch accent in Spanish. The phenomenon seen in other languages whereby certain content words are deaccented has not been observed in Spanish. The data gathered for this study supports these two observations. The syllable tier is used to break down words into syllables, marking stress using capital letters in the syllable nuclei. Since coalescence sometimes blurs word boundaries and since the stress system of Spanish is a mixed system (most words have penultimate stress but stress placement creates

minimal pairs and triplets[219]), this tier is critical to understanding the alignment between syllables and tones in Spanish.

4.2.3 The English Tier

This tier includes a translation from Spanish to English.

4.2.4 The Word Tier

The word tier shows word boundaries. A word is defined as a string of syllables separated by a space in the orthography.

4.2.5 The Breaks Tier

This tier is used to denote the sense of disjuncture felt by the speaker between words and pauses. The following numeric system, which parallels that of Beckman et al. (2002), is used in this investigation. Below is a summary of this coding system:

4 This is the biggest perceived disjuncture possible. This is generally referred to as an intonational phrase break.

1 This is felt as the default juncture between words within a phrase.

[219] For example:
[de ˈposito] *depósito* 'deposit' (noun)
[depo ˈsito] *deposito* 'I deposit' (verb, sentence)
[deposiˈto] *depositó* 'she/he deposited' (verb, sentence)

0 This is interpreted to mean "no perceptual pause", which occurs within a word and across words in cases where re-syllabification (or coalescence) occurs.

2 For English, this is traditionally used to represent cases of mismatch[220], most often between meaning and perceived juncture. This is also the meaning adopted in the present investigation.

3 This is used in the MAE_ToBI system to denote intermediate phrase boundaries, which are normally followed by pitch reset. However, the present study does not assume intermediate phrase boundaries as the data can be explained without them.

4.2.6 The Miscellaneous Tier

Speech events such as focus, unexpected voice quality (i.e. breathy, creaky), stuttering, lengthening, and other important phenomena not marked in other tiers are marked in this tier. Future studies may benefit from the notes included in this tier.

5. Results

Four main debates are presented in intonational research, which can be summarized by the following four questions. First, what is the pitch accent inventory for the dialect under investigation? Second, is there sufficient evidence to propose both intermediate phrase

[220] For example, cases where the native speaker feels that there should be a boundary of some type but where the pitch track does not reflect this boundary. Or, where a boundary is perceived but does not match the semantic content (i.e. a pause due to stuttering).

boundaries and boundary tones? Third, what is the nature of the boundary tone? Lastly, are there phonologically triggered effects on the F0?

Since the intonational phonology of Los Altos Mexican Spanish and Los Angeles Chicano Spanish have not been previously described, limiting our investigation will be necessary. This dissertation is concerned with addressing three of the aforementioned debates only. Pre-nuclear, nuclear, and boundary tones as well as their phonological realizations are proposed for broad and narrow focus statements and some question types (wh-questions and yes-no questions). This study also discusses boundary tones only as they relate to sentence type (declaratives and interrogatives). Lastly, phonologically triggered events such as tone delay, tone crowding, and tone lapse will be useful tools of analysis in this investigation.

The present study does not propose coding intermediate phrase boundaries. Intermediate phrase boundaries, also know as phrase accents, are used to denote a unit that is larger than a word but smaller than an utterance. In addition, speech events such as breaks and voice quality are coded in the data but their semantic load is not analyzed.

5.1 Pre-nuclear and Nuclear Pitch Accents in Declaratives

The literature reports that pre-nuclear pitch accents are those tones that are associated with the stressed syllable of every content word, except the last. The nuclear pitch accent is the accent associated with the stressed syllable of the last content word, which is the syllable that is universally felt to be the strongest one in the sentence[221]. The data analyzed for this dissertation confirms these generalizations. This section will highlight what was found for the pre-nuclear pitch accents.

[221] Nuclear pitch accents will be discussed in the next section.

The pre-nuclear pitch accent most commonly found in the broad focus statements collected for Alteño Spanish was L*+H. In a series, this tone is realized with the expected downstep after the first tone, represented as L*+!H. That is, there is a general tendency in Spanish, as in most languages, to have a natural downtrend as the sentence advances.

The most common nuclear pitch accent, the last pitch accent of the utterance, was the monotone H*. Since the nuclear pitch accent will almost always be the last in a series, its most common allotone is !H*, its downstepped counterpart.

5.2 Broad Focus Statements

The following four figures are representative of the broad focus melodic contour found for Mexican Alteño speakers. Figure 5.4 is a pitch track of the sentence *La niña habla* (The girl speaks). This sentence has a stressless syllable-stressed syllable pattern that is mutated due to coalescence (the expected la.nI.ña.A.bla is realized as la.nI.ñaA.bla). As will be fully explained later in this chapter, tone clash may be created when stressed syllables appear contiguously. In this sentence, it is difficult to assert if tone clash occurred since the phonological space at the end of sentences generally compromises the full realization of tones. The sentence has one pre-nuclear pitch accent (L*+H) and the expected nuclear pitch accent (!H*). This pattern was found for all speakers interviewed for this study.

As will be shown when analyzing the data collected for this dissertation as well as by revisiting data from the author's M.A. thesis, when the intonation phrase is composed of alternating stressed and unstressed syllables[222] and no stuttering, pausing, retraction, correction,

[222] When there is too much stressless material between tones, tone lapse occurs, changing the realization of the L*+H bitone. Likewise, having too little stressless material between tones

or other speech event interrupting the contour occurred, the pattern was always L*+H, followed by one or more L*+!H, ending with !H* .

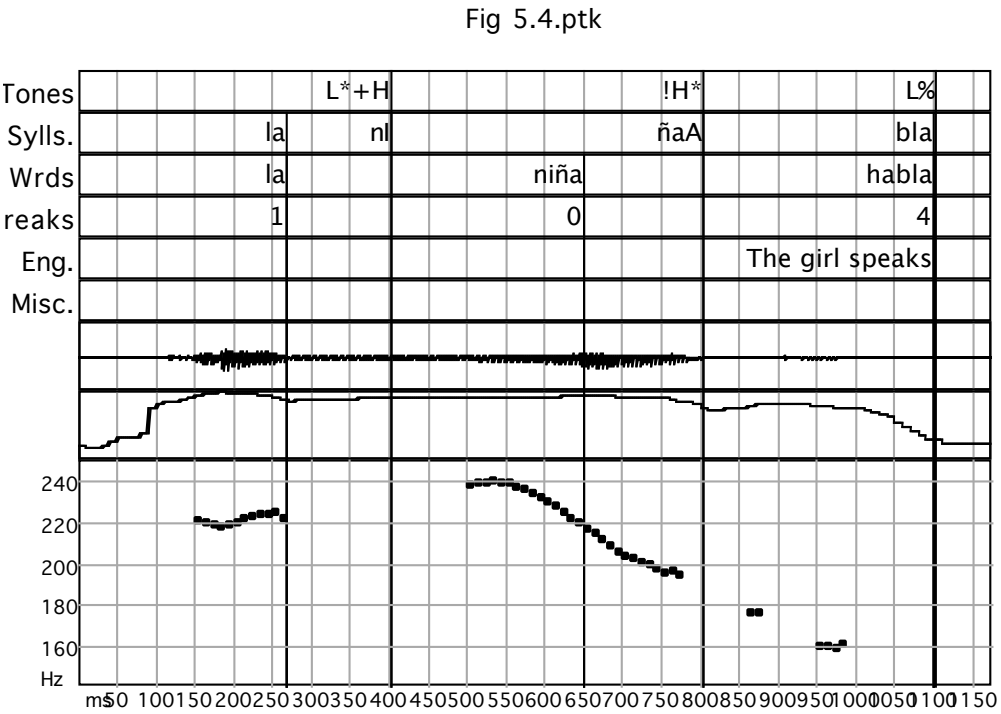

Figure 5.4
La niña habla (the girl speaks).
Expected L*+H !H* pattern (one pre-nuclear pitch accent).

Figure 5.5 is a pitch track of the sentence *La niña ya no hablará* (The girl will not speak anymore), which has the same general contour as Figure 5.4. This sentence, however, has two pre-nuclear pitch accents. *La niña ya no hablará*, thus, is characterized by one pre-nuclear pitch accent L*+H, followed by the downstepped allotone L*+!H, and the expected nuclear pitch accent !H*. Figure 5.4 and 5.5, thus, have the same pattern.

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compromises the status of the bitone as tone clash is created. These phonological events will be explained in a subsequent section.

Fig 5.5.ptk

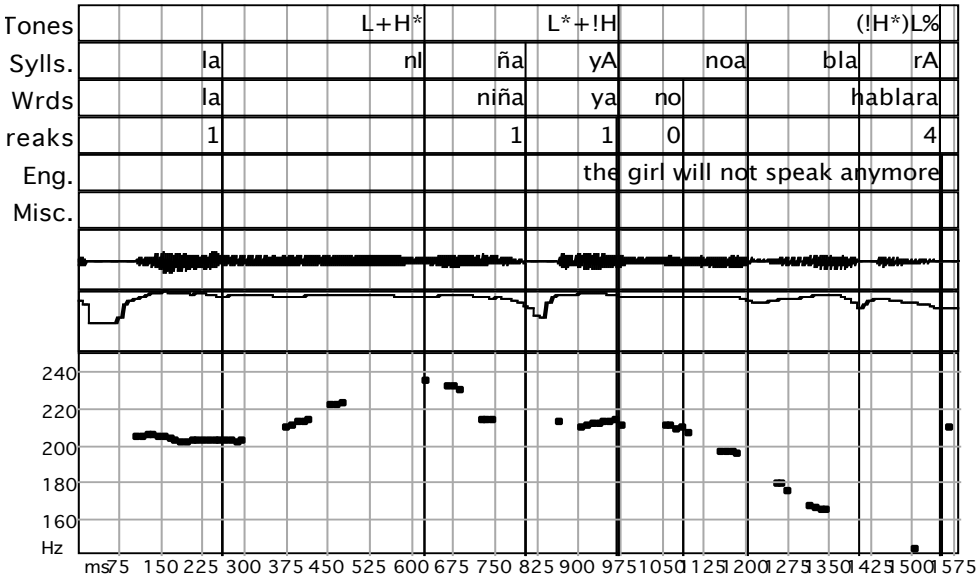

Figure 5.5
La niña ya no hablará (The girl will not speak anymore).
Expected L*+H L*+!H !H* pattern (two pre-nuclear pitch accents).

The L*+H L*+!H H* pattern was also found in the data collected in Mexico for the author's Master's thesis in the year 2000, shown below. Two sentences have been reproduced here in order to show that the aforementioned pattern was also found among Mexican Alteño speakers living in Mexico.

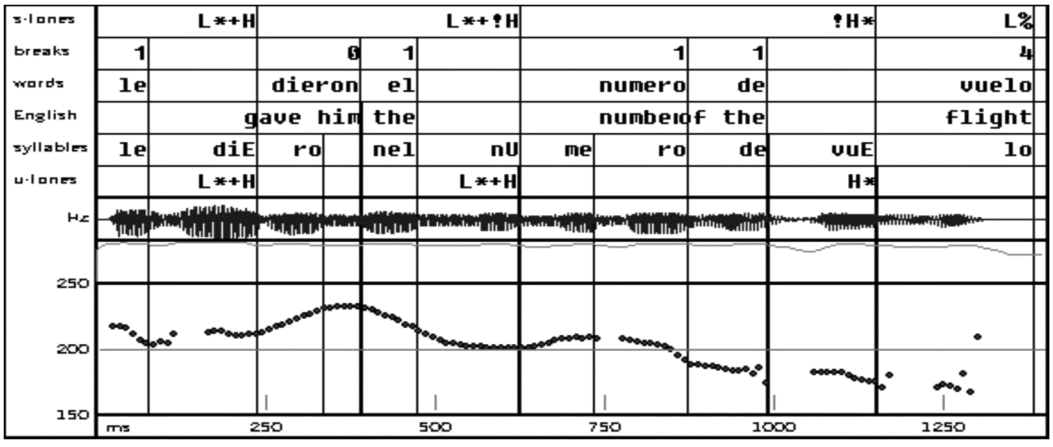

Figure 5.6
Le dieron el número de vuelo (They gave him/her the flight number).

Default L*+H L*+!H !H*pattern (two pre-nuclear pitch accents).

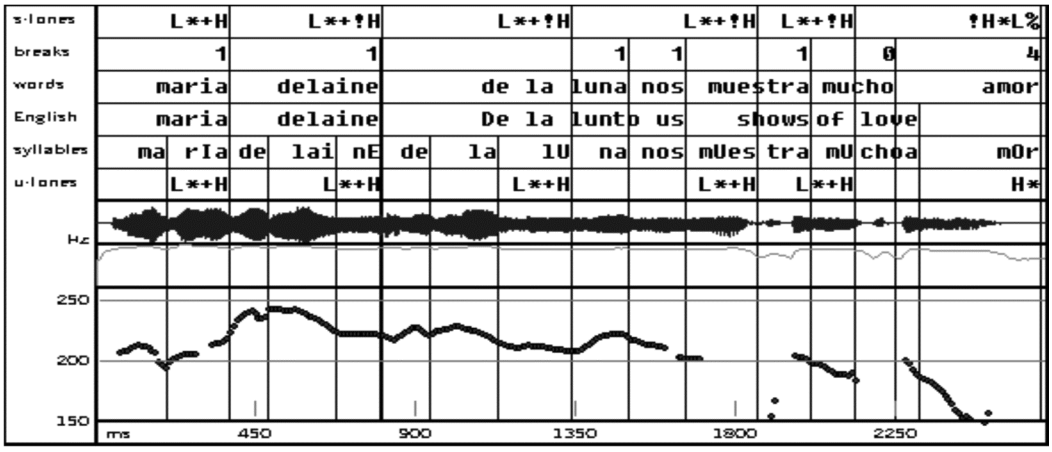

Figure 5.7
María Delainé de la Luna nos muestra mucho amor (María Delainé de la Luna shows us lots of love).
Default L*+H L*+!H !H* pattern (five pre-nuclear pitch accents).

5.3 Phonologically Triggered Patterns

5.3.1 Tone Clash

Pitch accents and/or boundary tones affect each other when they are close together. Unexpected tones may be realized when tone crowding, also called tone or tonal clash[223], occurs. Tone clash may occur when stressed syllables occur contiguously, which can emerge in two ways: when stressed syllables naturally appear next to each other or where coalescence places two stressed syllables next to each other. Coalescence is very common in Mexican Spanish. The reader is asked to consult section 3.5 for a description of this phenomenon.

The bitone L+H*, the monotone H*, or the bitone , L*+^H are in free variation with L*+!H in cases of tone clash. Similar tone clash-solving mechanisms have been reported in the

[223] "The term *tonal clash* refers to the interaction of tones within a limited space." (Willis, 2002, pg. 6)

literature, especially truncation or compression. Truncation or compression is a phonological process whereby one of the components of the bitone is not realized (Prieto, 2002).

In *La niña vendrá rápido* (The girl will come quickly) (Figure 5.8), there is no stresseless material between the (drA) of "vendrá" and (rA) of "rápido", especially in fast speech. The syllabification of the phrase is la.nI.ña.ven.drA.rA.pi.do, where the stressed syllables (drA) and (rA) appear next to each other. Thus, L+H* is employed.

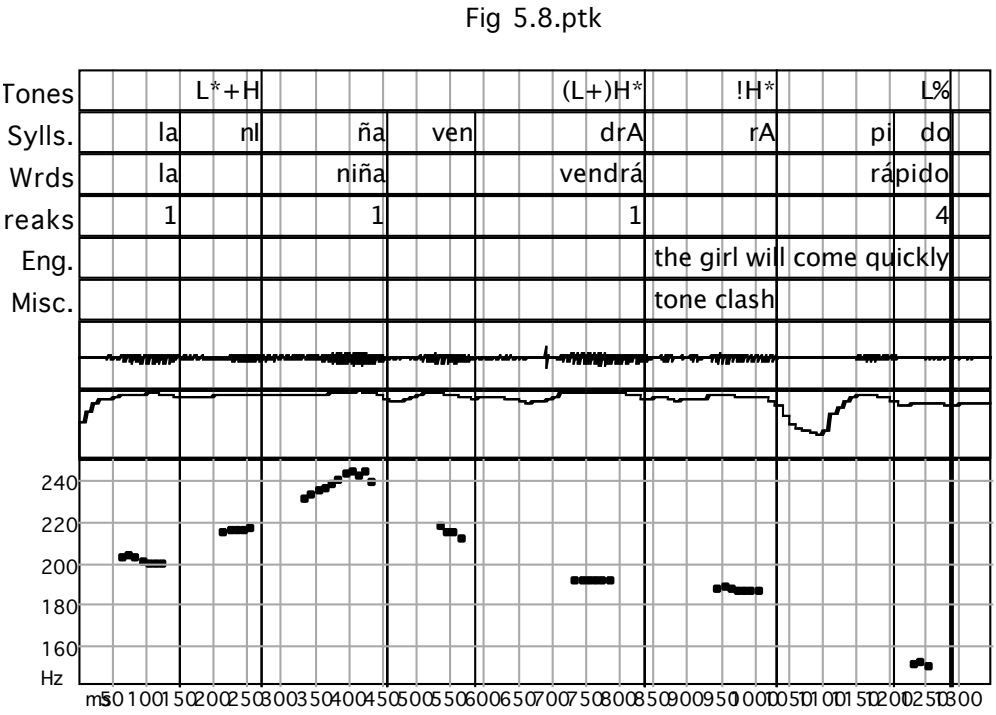

Figure 5.8
La niña vendrá rápido (the girl will come quickly).
Use of L+H* tone (one common tone clash-resolving strategy).

In the figure above, instead of the expected F0 valley on the accented syllable with a subsequent rise on the following syllable (represented as L*+H or L*+!H in figures 5.4 though 5.7), L+H* is used. L+H* is a contour characterized by a rising pitch movement during the accented syllable with the F0 peak located at the end of this syllable. In other words, the low and high sequence occurs within the stressed syllable.

Figure 5.9 is a pitch track of the sentence *La niña ya no habla* (The girl does not speak anymore), syllabified as la.nI.ña.yA.noA.bla. This sentence has the expected initial pre-nuclear pitch accent L*+H (over nI), one intervening stresslesss syllable (ña), a second unexpected downstepped monotone pre-nuclear pitch accent !H* (over yA), and the expected final pitch accent (the nuclear pitch accent !H*). The second pre-nuclear pitch accent is not realized as a bitone due to the proximity of the following pitch accent. In other words, due to tone clash, !H* is realized.

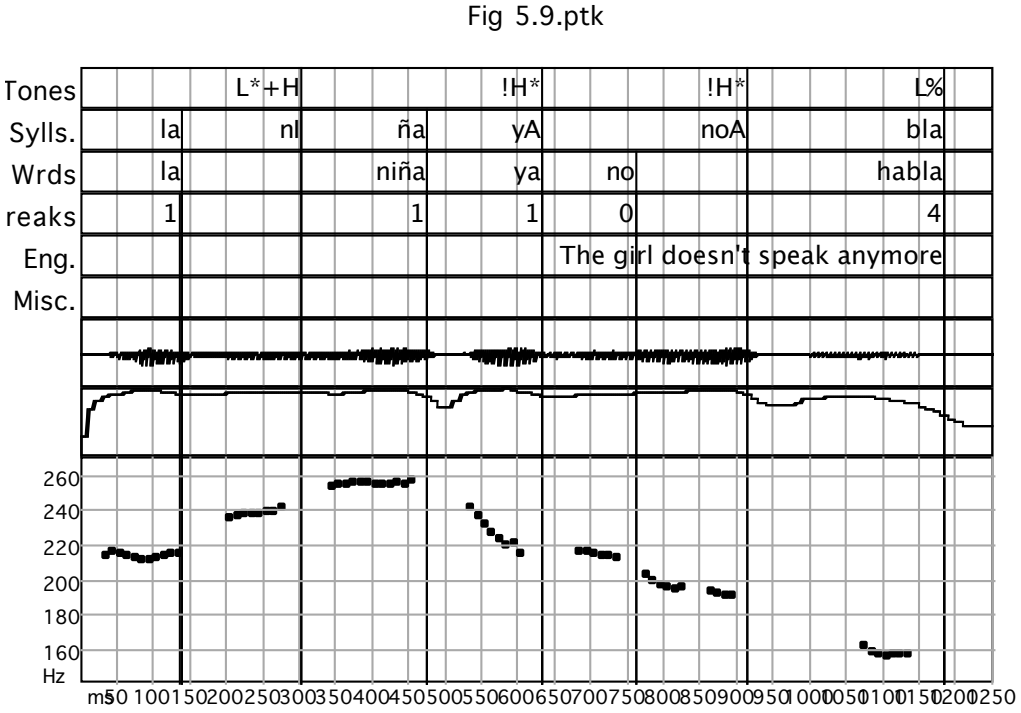

Figure 5.9
La niña ya no habla (The girl does not speak anymore).
Expected L*+H !H* !H* pattern (Two pre-nuclear pitch accents: a bitone and a monotone. The monotone downstepped nuclear pitch accent appears at the end of the phrase).

The last tone clash alternative is L*+^H, which is a pattern that shows an F0 valley on the accented syllable with a subsequent rise on the postaccentual syllable that is higher than the previous high, called an upstep. Similar tone clash-resolving strategies were also observed in the

data collected in 2000. Figures 5.10 and 5.11, from the author's M.A. thesis, show this possibility. In this utterance, the first bitone involved in tone clash is L+H* (in *María*) and the second is the upstepped L*+^H (in *Fátima*).

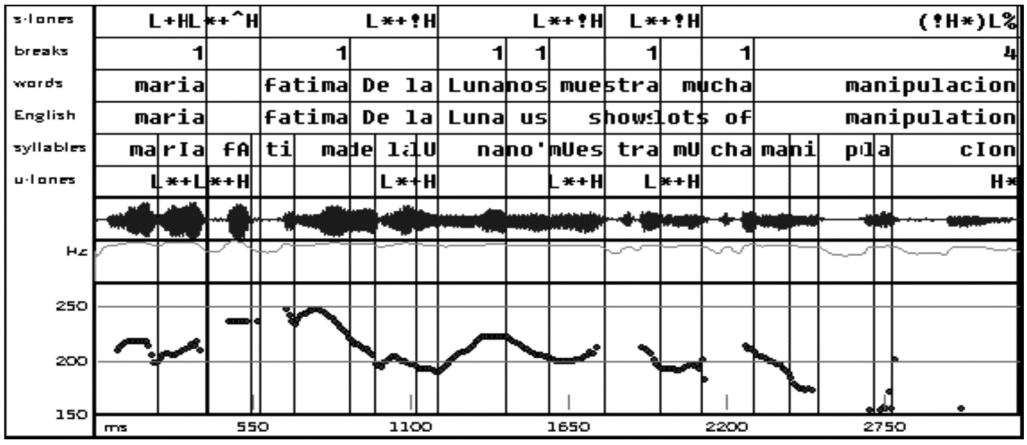

Figure 5.10
María Fátima de la Luna nos muestra mucha manipulación (María Fátima de la Luna shows us lots of manipulation).
L*+^H is used (another common tone clash-resolving strategy)[224].

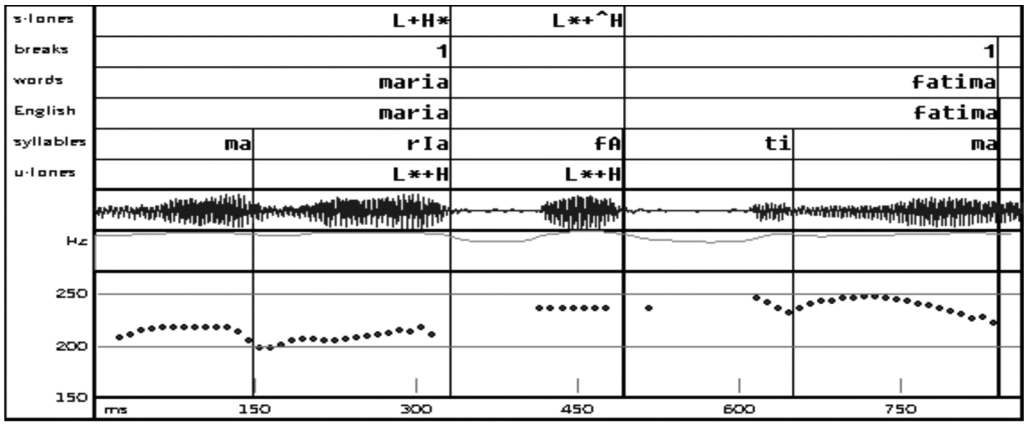

Figure 5.11
Expanded view of figure 5.10

[224] L+H* is also used (see figure 5.8 above)

5.3.2 Tone Lapse

Having too much space between tones, called tone lapse, can also alter the default pattern in Los Altos Mexican Spanish. When there is too much stressless space in an utterance, delaying and maintaining the high tone minimizes the toneless space.

The sentence *La niña ya no hablará* (The girl will not speak anymore) has one heavy and one light intervening stressless syllable, yA.**noa. bla.** rA[225]. In such cases, tone delay is the most predictable tone lapse-solving mechanism. Speakers overwhelmingly transformed the expected pitch accent from L*+!H to L*+>!H , with the second part of the tone being completed up to two syllables later than expected. In addition, the high is generally maintained over the entire stressless space.

[225] It should be noted that Mexican Spanish, especially in naturalistic speech, tends to coalesce contiguous vowels. That is, it is not uncommon that the phrase “no habla” [no. ˈa.bla] be syllabified as [ˈnwa.bla]. The heavy syllable provides the necessary material for tone lapse.

Fig 5.12.ptk

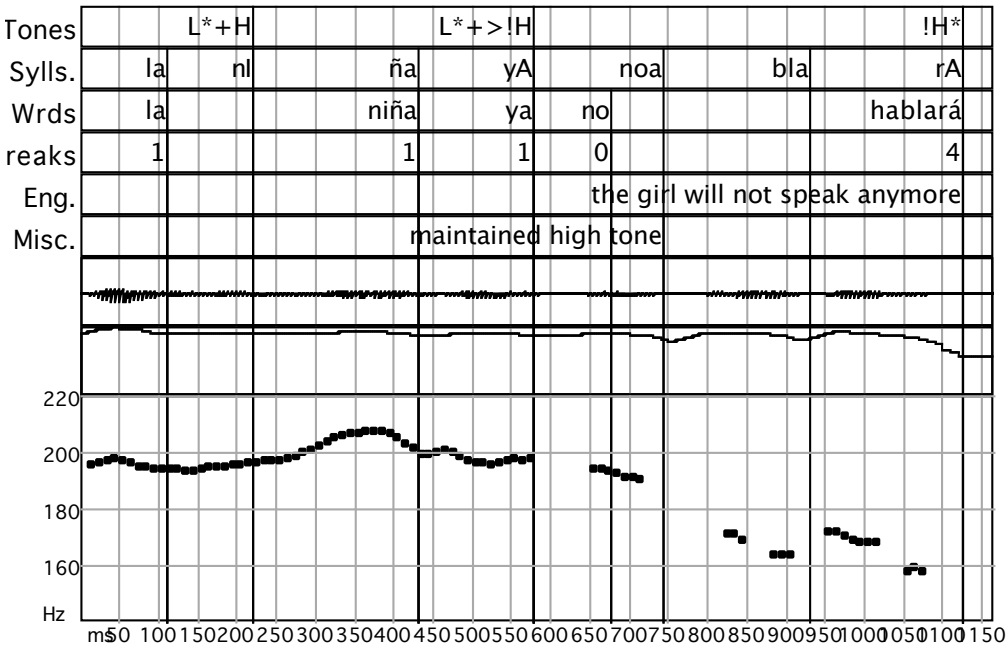

Figure 5.12
La niña ya no hablará (the girl will not speak anymore).
H tone delayed and maintained. L*+H L*+>!H pattern (a common tone lapse-resolving strategy).

In conclusion, broad focus declaratives in Los Altos Mexican Spanish use L*+H as the default bitone, most often realized as its downstepped allotone (represented as L*+!H). Two phonologically-triggered events may affect melody: tone clash and tone lapse. If tone clash occurs, which is defined as having no stressless intervening syllables between tones, the default bitone changes to L+H*, L*+^H, or H* (!H*). This is done in order to ensure that the bitone is realized as early as possible, forcing "space" between tones. If tone lapse takes place, which is defined as having two or more toneless syllables, the bitone is realized as L*+>H (L*+>!H), where the H is both delayed and maintained over several syllables. This strategy serves to prevent toneless space.

5.4 Pre-nuclear Pitch Accents in Declaratives with Focus

In Spanish, narrow focus occurs in two ways. A speaker can focus a word without word-order change[226], by simply augmenting the pitch, length, and magnitude of the focused word. This type of focus makes use of the L+H* pitch accent, which is optionally followed by a pause. Alternatively and more commonly, a speaker can focus a word by changing the order of the phrase[227], a strategy known as topicalization. Such strategy makes use of placing the focused word or phrase at the beginning of the sentence as well as using special pitch markers such as upstep and deaccenting. Pitch reset and deaccenting reduce or eliminate the low-high trajectory of pitch events. Both strategies essentially do the same thing to the pitch contour— create a very marked contrast between the focused item and the rest of the sentence.

Focusing a word or phrase by increasing the pitch of the focused word will be explored first. In these cases, narrow focus can be marked by using L+H*, with an optional pause. Pitch

[226] In the sentences below, 'Amalia', 'amaba' or 'Mariano', can be focused by placing emphasis on each of these words, without changing the word order.

(a) Amalia amaba a Mariano. (Amalia used to love Mariano).
Neutral Reading.
(b) Amalia amaba a Mariano. (Amalia used to love Mariano).
Focus on 'Amalia'.
(c) Amalia amaba a Mariano. (Amalia used to love Mariano).
Focus on 'used to love'.
(d) Amalia amaba a Mariano. (Amalia used to love Mariano).
Focus on 'Mariano.'

[227] In the sentences below, different parts of the sentence are focused via topicalization.

(a) Amalia amaba a Mariano. (Amalia used to love Mariano.)
Neutral Reading.
(b) Amaba Amalia a Mariano. (Used to love Amalia Mariano.)
Focus on 'use to love'.
(c) A Mariano Amalia amaba. (Mariano Amalia used to love.)
Focus on 'Mariano'.

reset occurs after the pause (see figure 5.13). Or, deaccenting follows the focused word (see figure 5.14). Figures 5.13 and 5.14[228] below show the two possibilities found in the data.

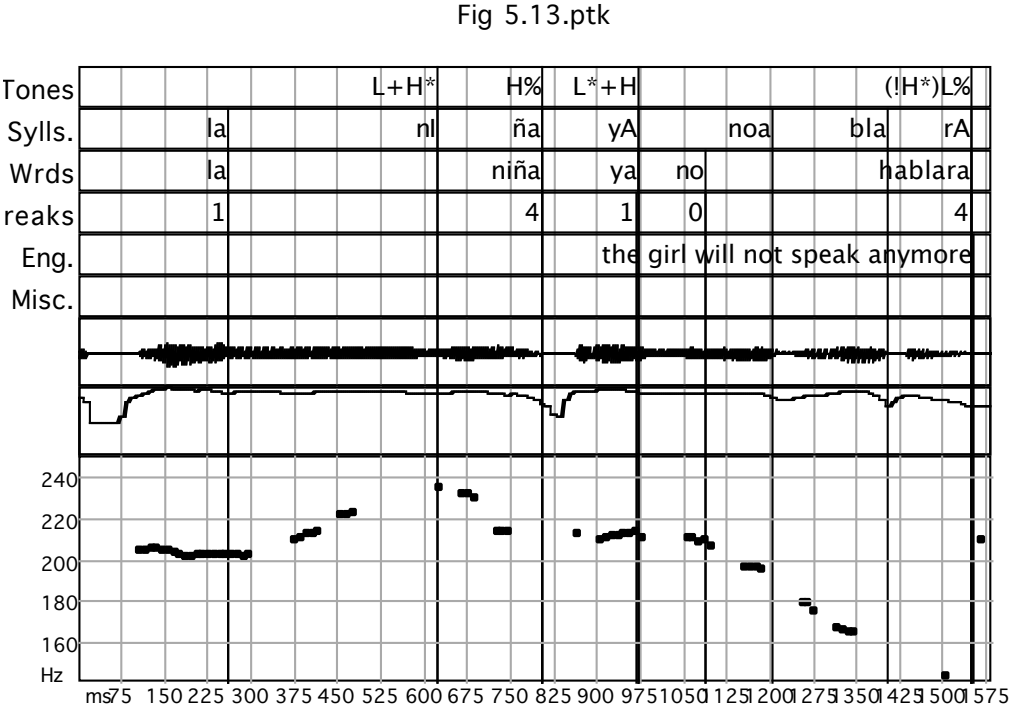

Figure 5.13
La niña ya no hablará (the girl will not speak anymore).
Focus followed by a pause, L+H*. The pause triggers pitch reset.

[228] In the pitch tracks, the nuclear pitch accent is not clearly seen in the pitch track. The author consulted with two native speakers of Spanish who, like the author, perceived an H* at the end of "hablará" and "habla". Thus, it is transcribed in the pitch tracks.

Fig 5.14.ptk

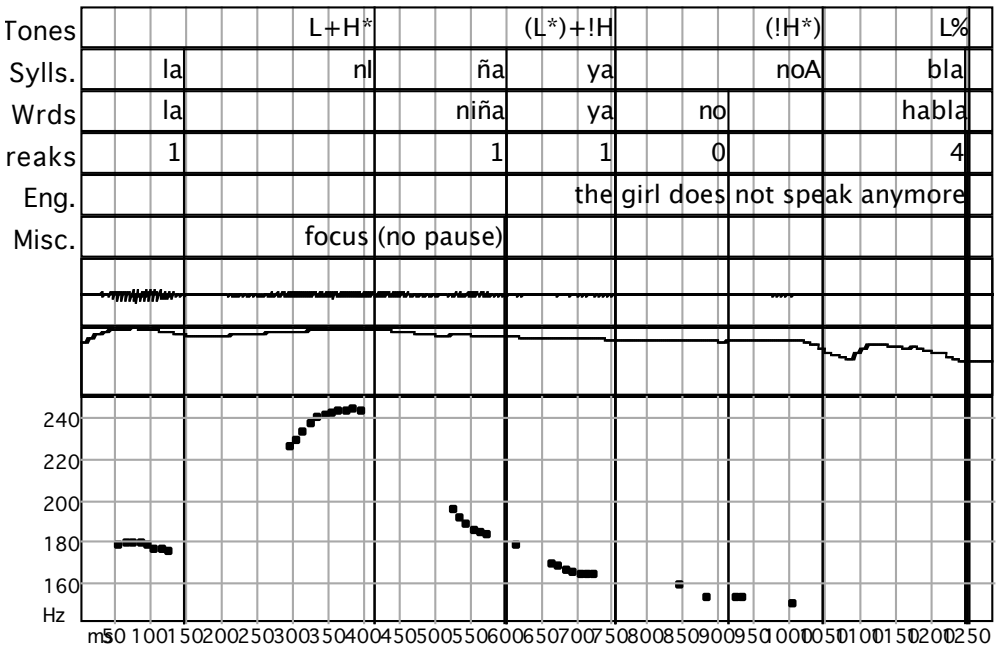

Figure 5.14
La niña ya no habla (the girl does not speak anymore).
Focus without a pause, L+H*. Deaccenting follows the focused word.

When topicalization is the narrow focus strategy, two options are possible: An upstepped version of the L+H* is used (coded as L+^H*), followed by a pause, which in turn triggers pitch reset[229]. Or, L*+^H without a pause but followed by deaccenting. The first pattern (L+^H*, with a pause, which creates pitch reset) is seen in Figure 5.15 below. The second pattern (L*+^H, without a pause, followed by deaccenting) is seen in Figure 5.16, also presented below.

[229] The pause restarts the pitch trajectory thereafter.

Fig 5.15.ptk

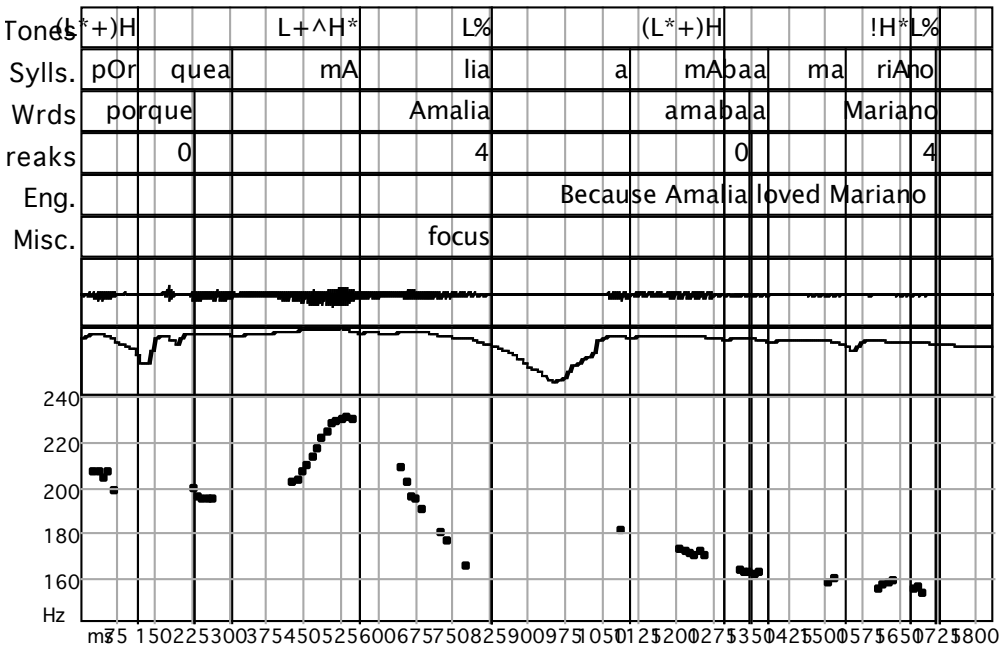

Figure 5.15
Porque Amalia amaba a Mariano (Because Amalia loved Mariano).
Statement with narrow focus.
L+^H* followed by a pause pattern. Pitch reset naturally occurs after the pause.

Fig 5.16.ptk

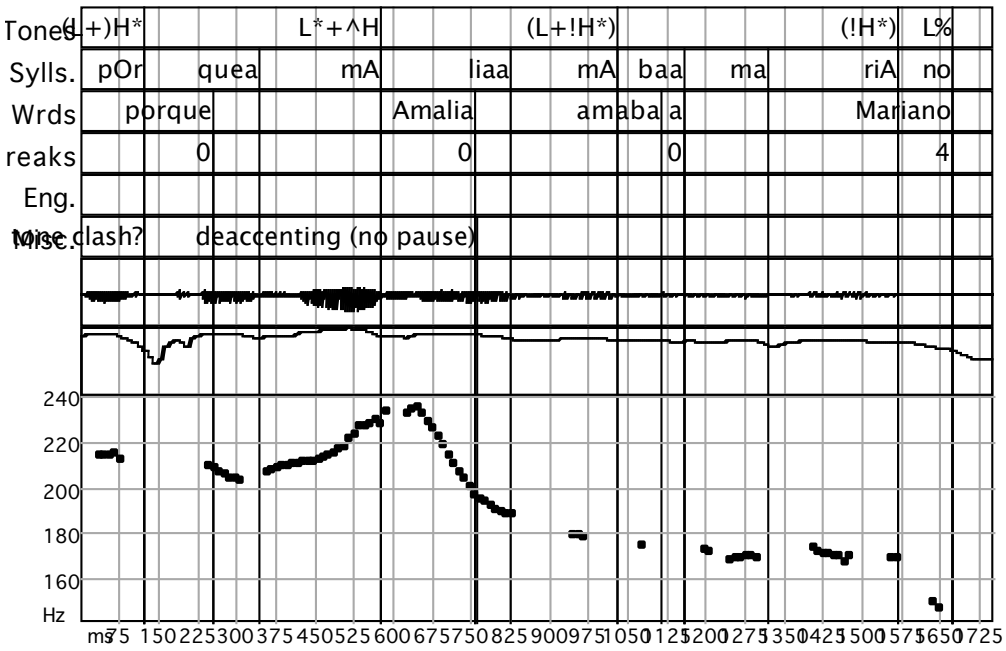

Figure 5.16
Porque Amalia amaba a Mariano (Because Amalia loved Mariano).
Statement with narrow focus.
L*+^H followed by deaccenting. Pause does not follow the focused item.

Figure 5.17, taken from Andrade 2000 and presented below, confirms the use of the L*+^H bitone for focused words.

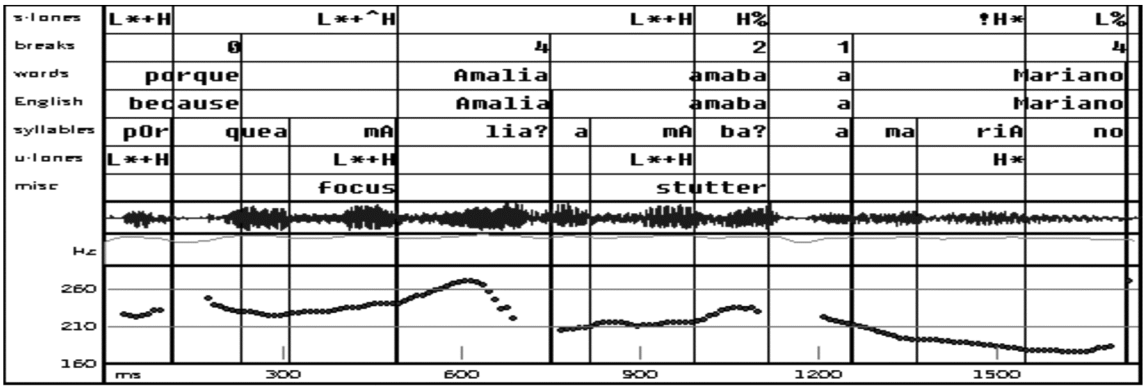

Figure 5.17
Porque Amalia amaba a Mariano (Because Amalia loved Mariano).
Statement with narrow focus.
L*+^H followed by deaccenting.

In conclusion, declarative sentences with narrow focus are produced by topicalization or by pitch augmentation. Focusing a word or phrase by increasing the pitch of the focused word means using L+H*, with an optional pause. When topicalization is the narrow focus strategy, two options are possible: L+^H*, followed by a pause and pitch reset. Or, L*+^H is used, without a pause but followed by deaccenting.

5.5 Nuclear Pitch Accents

The syllable that is perceived to be the strongest one in a phrase carries the *nuclear pitch accent* (NPA). In Spanish, the nuclear pitch accent is the last pitch accent of the phrase[230]. This dissertation codes H* as the nuclear pitch accent. In general, the nature of the nuclear pitch accent is such that it will never be the first tone in a phrase (unless the phrase is one word long), yielding the downstepped allotone !H*. In Alteño Spanish, although the perceived pitch accent may be a bitone, the pitch excursion at the end of the phrase is very difficult to see. In addition, the boundary tone may truncate what would be a bitone (see clash section, 5.3.1). The fact that the nuclear pitch accent is a monotone instead of the expected bitone can also be attributed to the lack of phonetic material at the end of a phrase, especially when words have ultimate and penultimate stress. Furthermore, the monotone nature of the nuclear pitch accent can also be due to peculiarities of the dialect. Creaky, breathy, and general devoicing qualities are common at the end of phrases in Alteño Spanish, all of which compromise the F0's ability to carry tune. The reader is invited to revisit chapter section 3 for more information on this topic.

[230] All research programs about Spanish intonation assert that the NPA is the last syllable in the intonational phrase. However, this is not necessarily the case in other languages.

In addition to the already discussed H* and !H* nuclear pitch accents and the nuclear pitch accents created by the pause in focus (L+H* and L+^H*), L* is a possible nuclear pitch accents in this dialect. L* (a low tone) is reserved as the nuclear pitch accent used for questions with focus, where the lowering of the contour works against the normal rise of the interrogative phrase (see Figure 5.18 below).

5.6 Interrogatives

Interrogatives will be discussed in this section as well as in the next section as they are characterized both by their nuclear pitch accents and their boundary tones. Two significant pitch events are characteristic of interrogatives. First, there is a predictable uptrend at the end (marked by the bounday tone, which will be discussed later). Second, the use of focus is necessary in order to obtain new information. That means using the already discussed focus allotones (L+H*, L+^H*, L*+^H) as well as a new tone that can contrast against the general uptrend in the question pitch contour, L*. This can be appreciated in the figures below. Figures 5.18 and 5.19 are new data and are wh-questions. Figure 5.20 is data from the author's M.A. research and is an echo question.

Fig 5.18.ptk

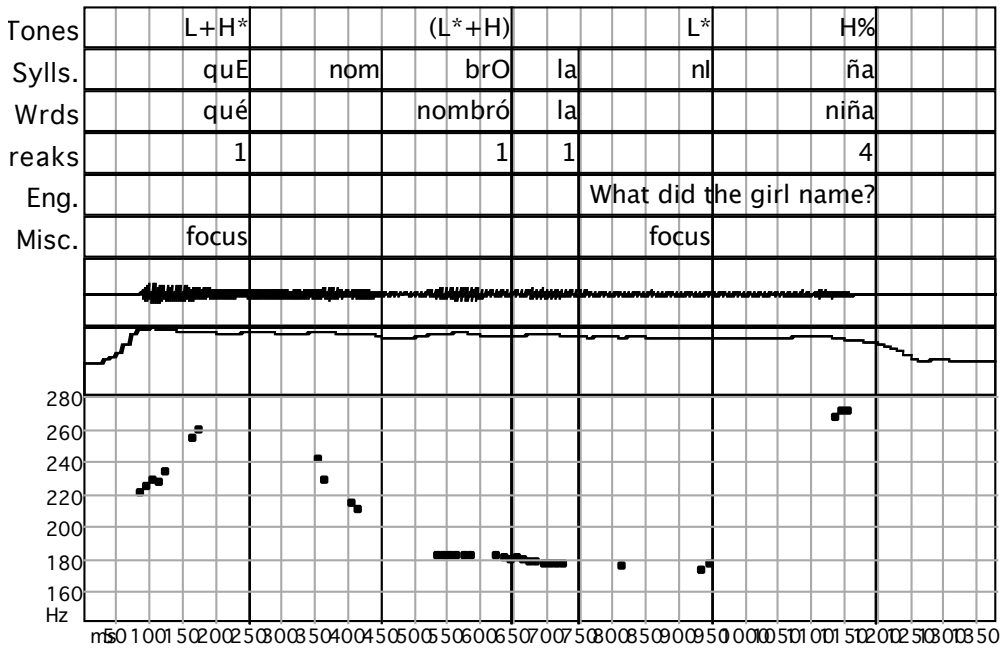

Figure 5.18
Wh-question
¿Qué nombró la niña? (What did the girl name?)
Wh-word is focused to obtain new information. The L+H* bitone is used.
Niña is also focused. L* is used in this case.

Fig 5.19.ptk

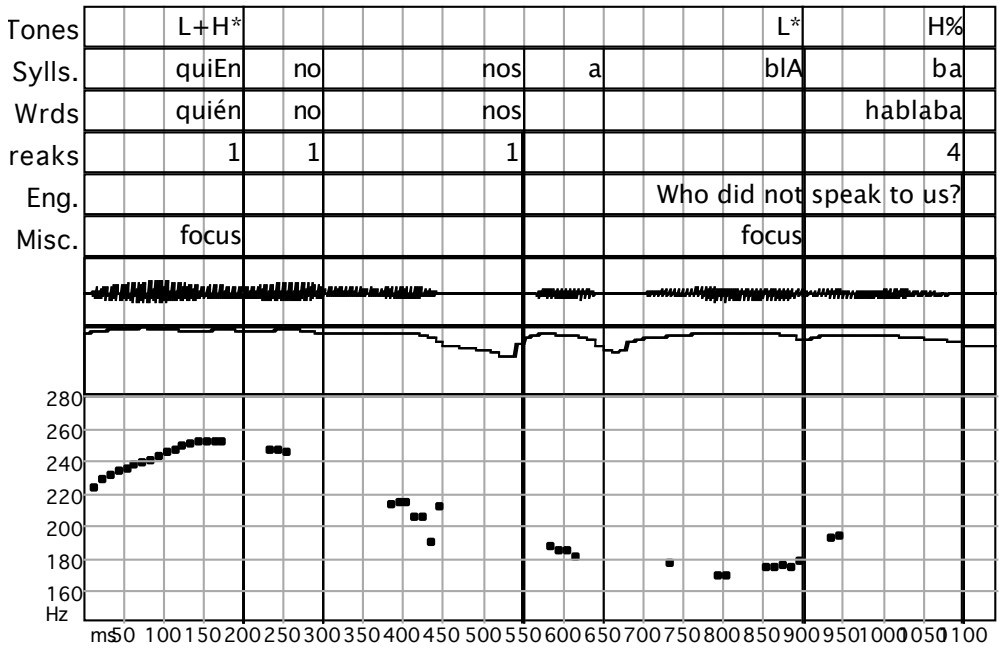

Figure 5.19
Wh-question
¿Quién no nos hablaba? (Who would not speak to us?)
Wh-word is focused to obtain new information. The L+H* bitone is used. *Hablabla* is also focused. L* is used in this case.

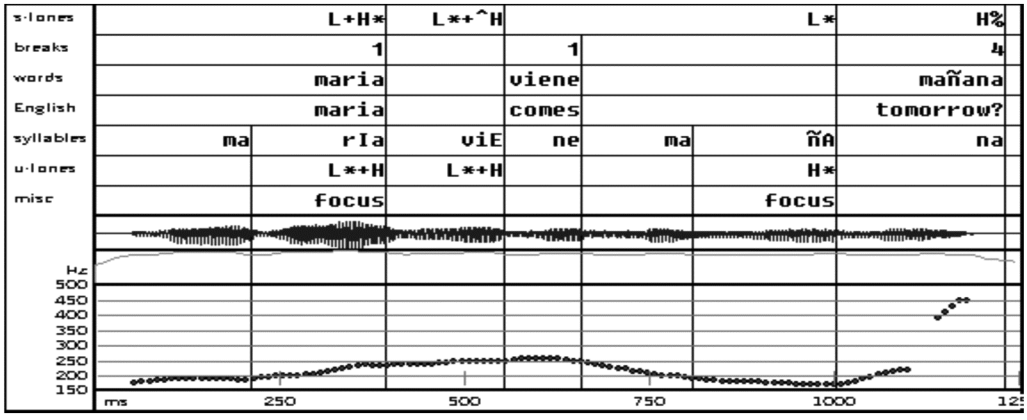

Figure 5.20
Echo question
¿María viene mañana? (María comes tomorrow?)
The proper name *María* is focused (L+H*) and is this is followed by tone clash, resolved by L*+^H. The adverb *mañana* is also focused (L*).

5.7 Boundary Tones

Like most of the world's languages whose intonation has been described, Alteño Spanish has two boundary tones, L% (low) and H% (high). The majority of studies on intonational phonology report that it is characteristic for the fundamental frequency to fall at the right edge of the phrase in declaratives and to rise in questions[231]. This dissertation's data asserts that L% generally occurs at the end of statements and H% generally characterizes the ends question. The reader is asked to study the pitch tracks to see examples of these pitch trajectories. M% was not evidenced in the Los Altos Mexican Spanish data collected for this study[232].

6. Conclusion

This chapter has briefly explored important intonational findings relating to the Spanish spoken by the rural and working classes of the Los Altos region of Jalisco, Mexico. In general, the tonal patterns of Alteño Spanish were found to be predictable and rule-governed.

The findings for the Mexican Spanish data indicate the following: 1) The default pre-nuclear pitch accent is L*+H (L*+!H). 2) The nuclear pitch accent in declaratives is H* (!H*) and L* in interrogatives. Since this dialect optionally employs pauses as part of its focus strategy, L+H* and L+^H* are sometimes used as nuclear pitch accents (when they mark the focus item and the contour has a break). 3) In utterances with narrow focus and default word order, L+H* is used (followed by pause and pitch reset or by no pause and deaccenting).

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[231] There are a few languages that are characteristically the opposite in this respect (e.g. Chickasaw is characterized by a L% in questions) (Gordon, 2007).

[232] Although not coded for this study, the Mexican naturalistic data was also checked for cases of M%. M% was not evidenced in the data.

Alternatively, in narrow focus declaratives with topicalization, L+^H* (followed by a pause and pitch reset) or L*+^H (without a pause but with deaccenting) is used. 4) The boundary tones are H% (in questions) and L% (in declaratives). 5) Phonological events such as tone clash and tone lapse shape the intonational excursion. Tone lapse employs L*+>H (L*+>!H) while tone clash uses L+H*, H* (!H*), or L*+^H.

The following table summarizes the findings presented in this chapter as well as those of other research programs in an effort to evidence, in a clear and concise manner, the melodic features that define Jaliscan Spanish (Los Altos Mexican Spanish). The reader is asked to consult the chapter for an explanatory exposition of this summary.

Dialect	**Pre-Nuclear Pitch Accents**	**Nuclear Pitch Accents**	**Boundary Phrase Boundaries**
Mexican Spanish Jalisco (Andrade, 2012)	L*+H L*+!H L*+>H L*+>!H L+H* L+^H* L*+^H L*	H* !H* L+H* L+^H* L*	L% H%
Mexican Spanish Mexico City (de-la Mota et al., 2010)	L* H* L+H* L+>H* L*+H H+L*	L* L+H* L+!H* L+^H*	L% M% H% HH% LH% HL% LM%
Peninsula Spanish and Venezuelan Spanish (Beckman et al., 2002)	L*+H L+H* H+L* H* L*+!H L+!H* ^L+H*	L*+H L+H* H+L* H* L*+!H L+!H* ^L+H*	L% M% H%
Peninsular Spanish (Sosa 1991, 1999).	H*+L L*+H L+H*	L+H* H+L* H+H* L* H*	HL% L% H%
Peninsular Spanish (Nibert, 2000b)	L*+H	L+H H* H+L*	L% H% ^H!

Table 5.4 Intonational comparison across dialects.

Chapter 6

CHICANO SPANISH INTONATION

1. Introduction

The question of whether or not Chicano Spanish exists is still present in the literature. Researchers who advocate for its existence have cleverly analyzed aspects of the phonetic and phonological system, the morphological system, the lexicon, the syntax, and an array of sociolinguistic topics of the many varieties studied. To date, however, no description of Chicano Spanish intonation has been published. The present chapter focuses on what Los Angeles Chicano Spanish is by describing some of its intonational contours. By paying close attention to this variety's melody, this dissertation provides evidence that the Spanish spoken by Los Angeles Mexican Americans and others who align themselves linguistically with them is a variety in its own right, a variety that is intonationally different from its Mexican baseline described in chapters 5.

2. Methodology

2.1 Participant Selection

College students and college graduates were sought out as they are less inhibited in participating in a linguistic study and are less intimidated by using digital recording technology. A general invitation directed at Spanish-English bilinguals was conducted on university campuses by means of a flyer. Twenty people responded to this invitation. Speakers were also recruited by word of mouth, by making announcements during Spanish language composition classes, and via e-mail invitations. Thirteen people responded in this manner. The thirty-three people who were initially interested in participating in the study were asked to informally meet

with the investigator or to engage in a telephone conversation with the investigator. The investigator asked general background and language attitude questions in Spanish and English. The following paragraphs present the informant-selection process.

Question 1: Do you think that Spanish and English are equally important? Although the men and women selected for this study reported using English more frequently than Spanish, the participants whose data was used for this dissertation regarded English and Spanish as "neutral". Having the same "valorization" of the language in question is important because it ensures that the participants will use Spanish in their daily interactions, even with people with whom they could speak English only. In multilingual communities, the languages at play do not always have the same value, however. For example, Mendoza-Denton's 1999 article "Fighting Words: Latina Girls, Gangs, and Language Attitudes" explores "polar extremes" of two Latina groups in Northern California, recent immigrants who identify with a Mexican identity and call themselves "Sureñas" and U.S. born Chicanas/Latinas who call themselves "Norteñas" and "who identify with a bilingual/bicultural Chicana identity." (Mendoza-Denton, 1999, p. 41) Though they technically share the same ethnicity and live in the same geographic area, they belong to different linguistic communities as "they are in deep conflict over the politics of identity in the community" (Mendoza-Denton, 1999, p. 41). Mendoza-Denton further explains that, "this conflict is reflected in their language attitudes towards Spanish and English…" since, in this particular community, "Spanish and English are not neutral media of communication but symbols of social allegiance and identity" (Mendoza-Denton, 1999, p. 41). Thus, the most important criteria for this investigation was that all participants regarded Spanish to be as important as English.

Question 2: Do you ever mix Spanish and English? Do you know what *Spanglish* is?

The speakers selected for this study confessed that *Spanglish* was a linguistic convention they **always** used among their bilingual friends. When asked **why,** their answers revolved around the topic of "better communication[233]". Like Zentella (1998), who asserts that "code-switchers are not creating a hodgepodge, but are, instead, juggling two grammars impressively" (p.102), the participants in the present study exhibit agency in language use. When asked to comment on other people's attitudes about their use of *Spanglish* (i.e. their parents and teachers), they reported that many people didn't like it but that they ultimately used language as they pleased[234]. The second most important criteria for this investigation was that all participants felt comfortable using Spanish, English and *Spanglish*, without feeling that the study was designed to judge or censor them.

Another important consideration in the participant-selection process was the relationship between social class and perceived access to social mobility through higher education. In asking about the role of education in the informant's family and/or community, the investigator wanted to eliminate students who would be socially marginalized for participating in an academic study, especially if their recorded interactions included people from their family and home community. The following question was included in the survey: **Question 3: What do you think the role of education is in your family and in your home community?** All participants reported growing up in bilingual working-class neighborhoods whose patriarchs, matriarchs, and/or community leaders perceived higher education as an upward social mobility tool. Thus, the participants' college education plans were generally supported in their family and/or community context.

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[233] Two participants answered "Why not?" (JU and RS), one answered "'Cuz it's cool!" (AR), and another one answered that it allowed them to say, "what [they] REALLY feel!" (AS).

[234] Some responses were: "They're just jealous!" (RS) and "Oh well if they don't like it!" (MA)

Question 4: Do you think of yourself as Mexican, Mexican-American, Chicano/a, Latino/a, or Hispanic? And, do you feel connected to the Mexican-American or Chicano/a community on campus? Other potential socially driven linguistic differences among the participants selected for this study were avoided by selecting students who identified as Chicano/a or Mexican-American (despite of their parents' country of origin), or who felt "connected" to the Chicano/a or Mexican-American community. In theory, those who identify with or who are socially connected to the Chicano/a community are more likely to engage in Chicano Spanish use. Bucholtz & Hall (2004) conclude that, "when individuals decide to organize themselves into a group, they are driven not by some pre-existing and recognizable similarity but by agency and power. Identity, then, is a process not merely discovering or acknowledging a similarity that precedes and establishes identity but, more fundamentally, of inventing similarity by downplaying difference" (p. 369).

Question 5: Have you formally studied Spanish? Starting with Ferguson (1959) and others shortly thereafter, the term *diglossia* has been used extensively when describing language contact communities. The term has been used to mean everything from language variety to bilingualism. The college educated bilingual community of Los Angeles Chicanos/as used for this study presents a classic case of diglossia and may be of interest for such studies. The participants selected reported having access to the following varieties: *High* or educated Spanish (**HS**), *High* or educated English (**HE**), *Low* or popular varieties of Spanish (**LS**), and *Low* or popular varieties of English (**LE**). The participants of this study, in addition to speaking their family's and community's Spanish and English vernacular, have all studied academic Spanish and English in high school and in college. Diglossia will not be formally explored in this study, however interesting.

Another consideration for selecting the speakers who participated in this investigation was to include as many men as women. This was an impossible task for two main reasons. First, more women responded to the invitation. Second, less men than women reported being *balanced bilinguals*. This has been observed in other studies. In fact, Mendoza-Denton observed that, in her study, women were usually more fluent in Spanish than men due to the fact that "girls were expected to help women with chores for which Spanish was appropriate." (1999, p. 96). The final distribution was four men and eight women.

Lastly, the individuals who participated in the study were selected because they were comfortable carrying a data collection device while they participated in the study, stated that they would be available for follow-up interviews, and were born and raised in the greater Los Angeles area. Three speakers were from the Central Valley, three speakers were raised in South Los Angeles, three speakers were from South-Central Los Angeles, and three speakers grew up in the East Los Angeles area.

In conclusion, in addition to age and demographic specifications, the participants of the present-study are regarded to be a linguistic community for the purposes of this study as they share the following critical characteristics: All participants were between eighteen and thirty years of age who perceived Spanish and English as neutral tools for communication and who engaged in code-switching. All participants came from working-class families who value college education and who, due to this, have "access" to educated and popular varieties of Spanish and English. Lastly, the participants were also selected because they were comfortable using a data collection device and were willing to participate in follow-up interviews.

2.2 The Participants

The Los Angeles Chicano Spanish data was collected from 2007 to 2009. Of the twelve participants, eight were Mexican American, three were Salvadoran American, and one speaker was half Salvadoran half Mexican. Speakers were not financially compensated for contributing to the study. Participants were informed that they could withdraw their data from the study at any point during or after the completion of the study.

The idea of including Salvadoran Americans in a study of Chicano Spanish may be counterintuitive to some researchers. After all, won't these participants use a different intonational system given the fact that their home dialect is distinct from that of Mexican Americans? Although it is true that the Salvadoran and the Mexican baseline are melodically different to even the untrained ear, this study will establish that the youth of Los Angeles uses the **same** melodic contours regardless of the home dialect. In other words, the participants of this study access and utilize Chicano Spanish while participating, which provides empirical evidence for the existence the Chicano Spanish variety. To the extent that this variety was part of their intonational repertoire, it can be argued that Chicano Spanish exists for these speakers and, in turn, for the larger Angeleno population. As noted in Chapter 1, Parodi (2003, 2009) has evidenced the existence of a neutralized and productive Los Angeles Spanish. Her studies study this phenomenon in relation to the lexicon and to specific segmental features.

2.3 Data Collection and Token Selection

The data collected for this study was gathered in two ways. First, all participants were asked to carry around a digital recording device that recorded some of their interactions for a week. When the speaker desired privacy, the recorder could be turned off manually. Otherwise,

the recorder saved every interaction that took place while the device was worn by the speaker. In their conversations, naturally, they interacted with monolingual English speakers or with bilinguals who opted to only use English in their interactions. Although the recorder collected data indiscriminately, only sentences in Spanish were extracted from the recordings, coded and analyzed. In cases where the interlocutor was picked up by the recorder, the Spanish-language data were saved as a data subset for later analysis. Overlapping sequences were discarded. A follow-up interview was also conducted by the author in order to gather scripted sentences analogous to the sentences collected for Los Altos Mexican Spanish. Appendix 2 has the list of scripted sentences recorded during this interview.

Given the data collection design, each speaker turned in different amounts and varying quality of data. Some, for example, turned in over thirty hours of recorded material while others turned in only a few conversations less than an hour in duration. Some speakers recorded intimate conversations that provided very useful data as pitch tracks were easily extracted while others turned in recordings that were unusable due to background noise, overlapping conversations, or other factors. In total, over 107 hours of recordings were collected for this investigation. All of the data were converted into wave files and were saved in the speech analysis program PitchWorks (Sciconrd). From these data, 100 naturalistic sentences containing Spanish were selected, coded, and analyzed for this study. In addition, each participant volunteered 170 scripted sentences (yielding 2,040 sentences total). Of this collective total, 100 scripted sentences analogous to those collected for Los Altos Mexican Spanish were selected, coded, and analyzed for this study.

The same theoretical principals applied to Los Altos Mexican Spanish were implemented in this study of Chicano intonation. The same coding system utilized for Mexican Spanish was

used initially and was modified as needed. In addition, the tiers that were proposed for Los Altos Mexican Spanish were also used. The reader is asked to consult chapters 4 and 5 for an exploration of the theoretical framework and a detailed explanation of the coding system.

3. Results

3.1 Broad Focus Declaratives

As mentioned in the last chapter, in intonational phonology, pre-nuclear pitch accents in Spanish are associated with every content word, except the last. The nuclear pitch accent is the accent associated with the stressed syllable of the last content word, the strongest syllable in the sentence.

In the Mexican Spanish data presented in the last chapter, the most commonly used pre-nuclear pitch accent in the broad focus statements collected was the bitone L*+H (most often realized as L*+!H but modified depending on the context). The most common nuclear pitch accent was the monotone H*, most often realized as its downstepped allotone !H*.

The scripted data yielded a similar general pattern for all the participants in the Chicano Spanish study regardless of their home dialect. L*+H and its downstepped counterpart L*+!H were the preferred pre-nuclear pitch accents and !H* was the most common nuclear pitch accent.

The contour range of the intonational phrase in broad focus declaratives is significantly reduced in the scripted speech of Los Angeles Chicano Spanish. In general terms, neutral broad focus sentences were realized with a pitch range that was only about 50 Hertz (see figures 6.1 through 6.4 below). The average range for Mexican speakers was 100 Hertz (see previous chapter). Thus, the low-high contour is less perceptible in Los Angeles Spanish. Below, figures 6.1, 6.2, 6.3, and 6.4 are representative broad focus statements for this dialect.

Fig 6.1.ptk

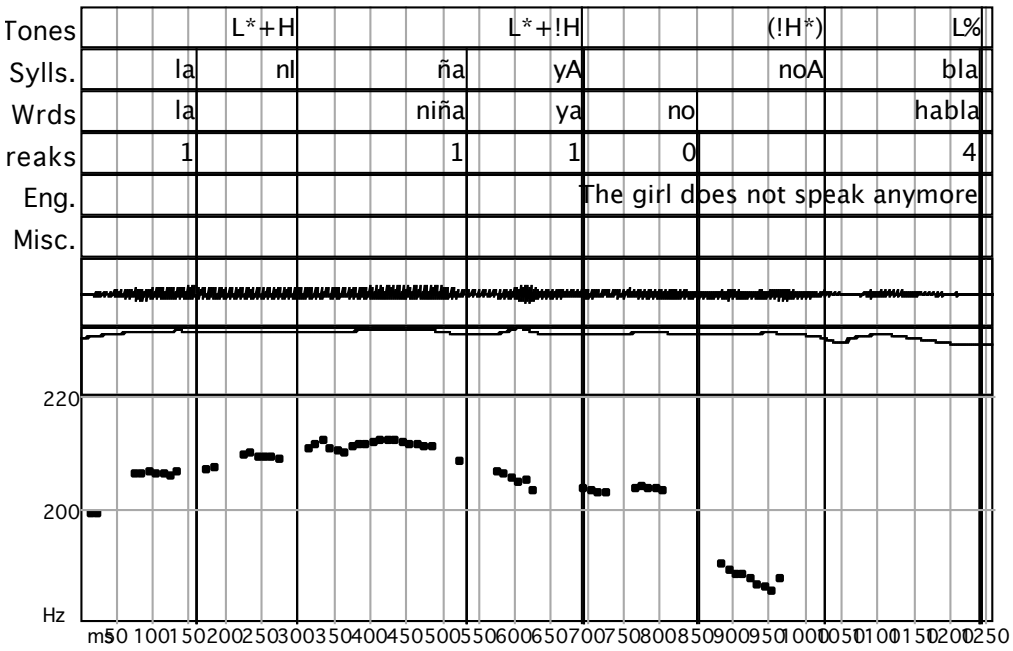

Figure 6.1
Broad focus sentence realized by a Mexican-American speaker showing the default L*+H L*+!H !H* pattern in Chicano Spanish as well as a reduced pitch range (contours realized between 180 and 215 Hertz).

Fig 6.2.ptk

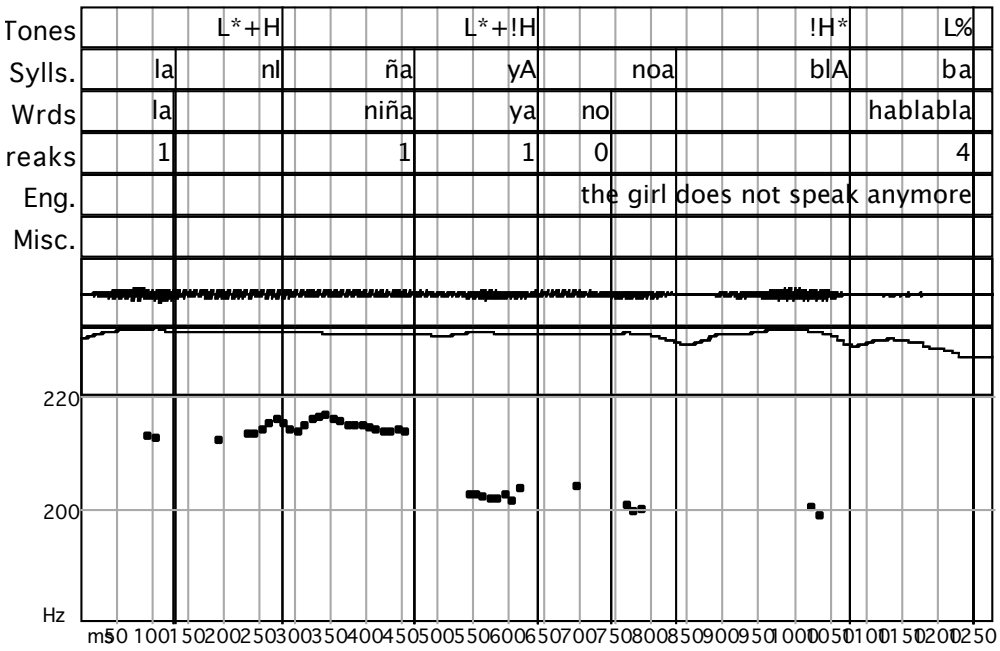

Figure 6.2
Broad focus sentence realized by a Salvadoran-American speaker showing the default L*+H L*+!H !H* pattern in Chicano Spanish as well as a reduced pitch range (contours realized between 190 and 220 Hertz).

Fig 6.3.ptk

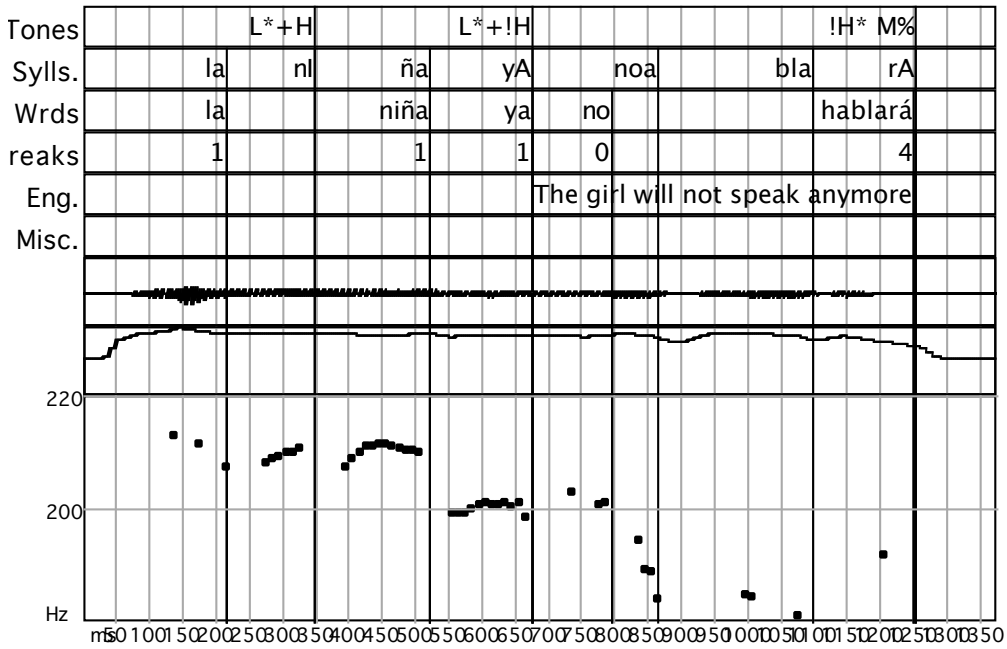

Figure 6.3
Broad focus sentence realized by a Salvadoran-American speaker showing the default L*+H L*+!H !H* pattern in Chicano Spanish as well as a reduced pitch range (contours realized between 180 and 220 Hertz).

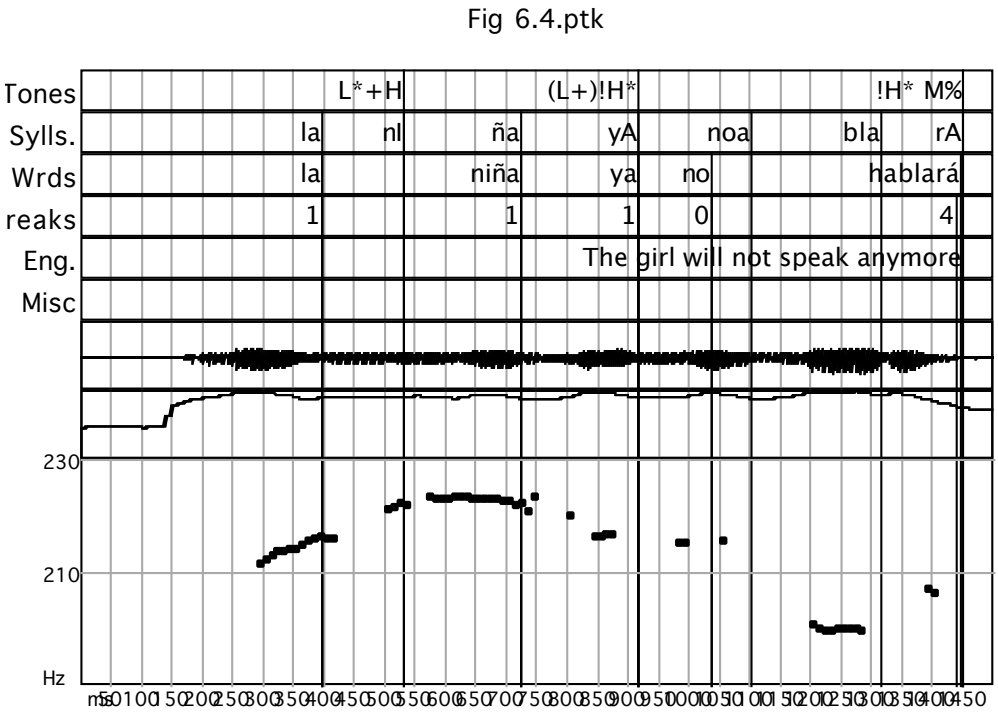

Figure 6.4
Broad focus sentence realized by a Mexican-American speaker showing the default L*+H L*+!H !H* pattern in Chicano Spanish as well as a reduced pitch range (contours realized between 195 and 225 Hertz).

3.2 Tone Clash in Broad Focus Declaratives

Contiguous stressed syllables create environments of tone clash. As discussed in the last chapter, Los Altos Mexican Spanish resolves tone clash in three ways: The bitone L+H* is used, a tone which is characterized by a rising pitch movement during the accented syllable with the F0 peak located at the end of this syllable (that is, the entire low-high trajectory is realized within the stressed syllable). Alternatively, L*+^H is used, where there is an F0 valley on the stressed syllable with a subsequent rise that is higher than the previous high. Lastly, Mexican Spanish uses H* (!H*), a truncated version of the original L*+H.

In Los Angeles Chicano Spanish, tone clash is generally resolved by maintaining the default L*+(!)H and either merging the following tone with this one (see figure 6.5 below) or by

truncating the first tone (see figure 6.6 below). Below, these merging and truncating mechanisms are represented by the use of parenthesis on the tones tier.

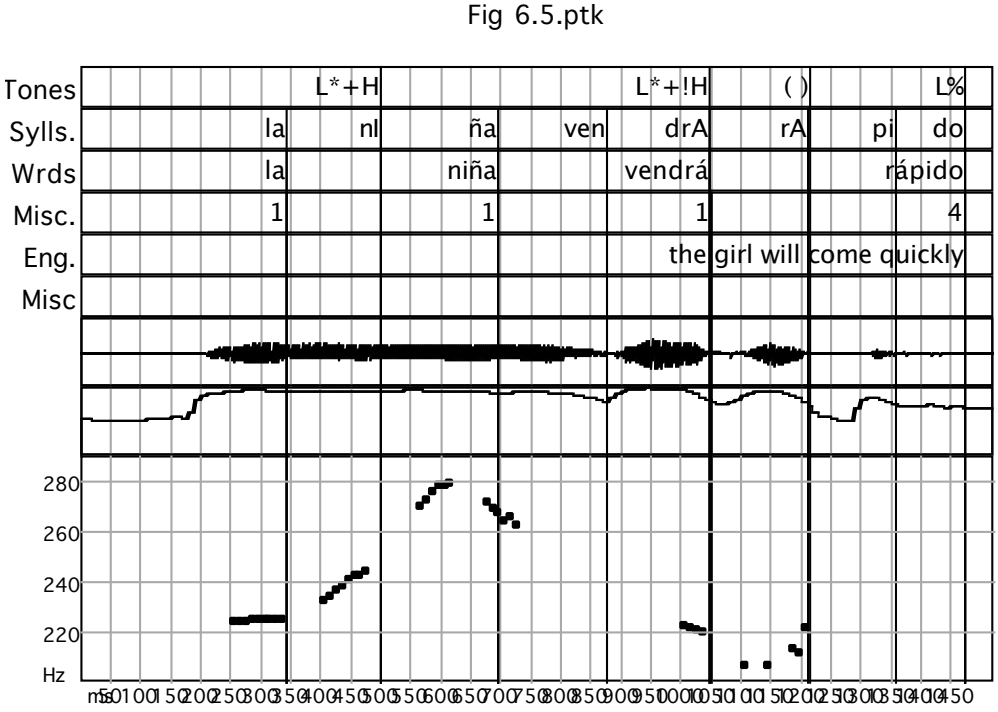

Figure 6.5
Broad focus sentence with tone clash realized by a Salvadoran-American speaker showing the default L*+H L*+!H pattern followed by an absent nuclear pitch accent, represented by ( ).

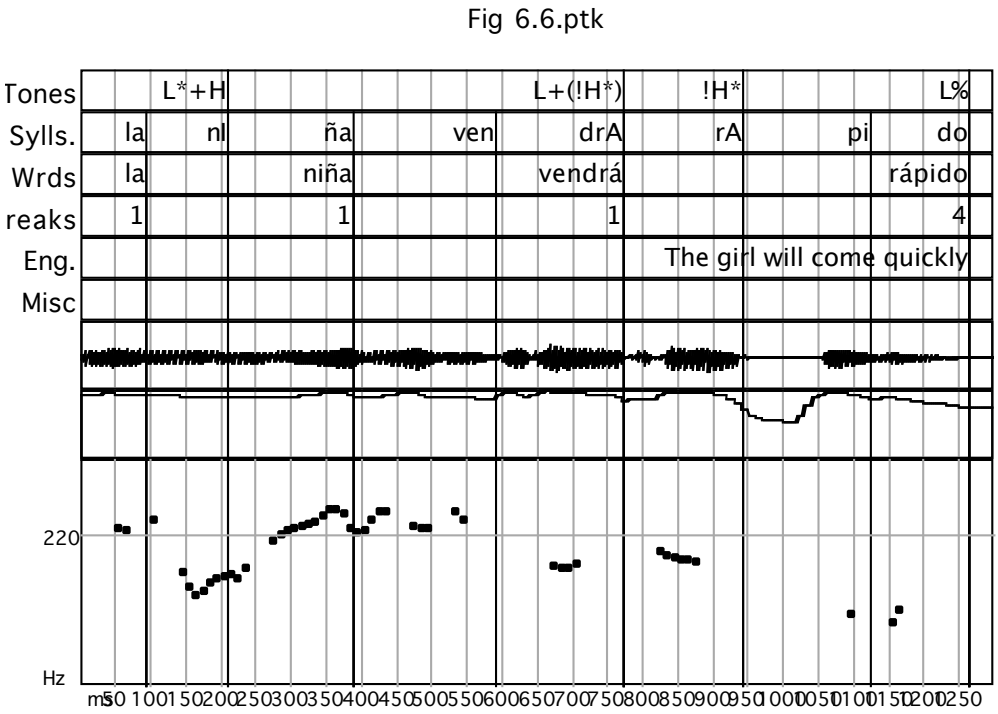

Figure 6.6
Broad focus sentence with tone clash realized by a Mexican-American speaker showing a truncated L*+H L*+!H pattern (an absent H* on the pre-nuclear pitch accent, represented by ( )).

3.3 Tone Lapse

Tone lapse usually occurs when there is enough stressless space between tones. In Mexican Spanish, two or more stressless syllables trigger tone lapse-solving strategies. In Mexican Spanish, tone lapse is resolved by changing L*+!H to L*+>!H, with the second part of the tone being completed one to two syllables later than expected (marked as > on the pitch track). The same pattern, a bitone whose high tone is realized over several syllables, is consistently observed in Chicano Spanish. This can be appreciated in Figures 6.7 and 6.8 below.

Fig 6.7.ptk

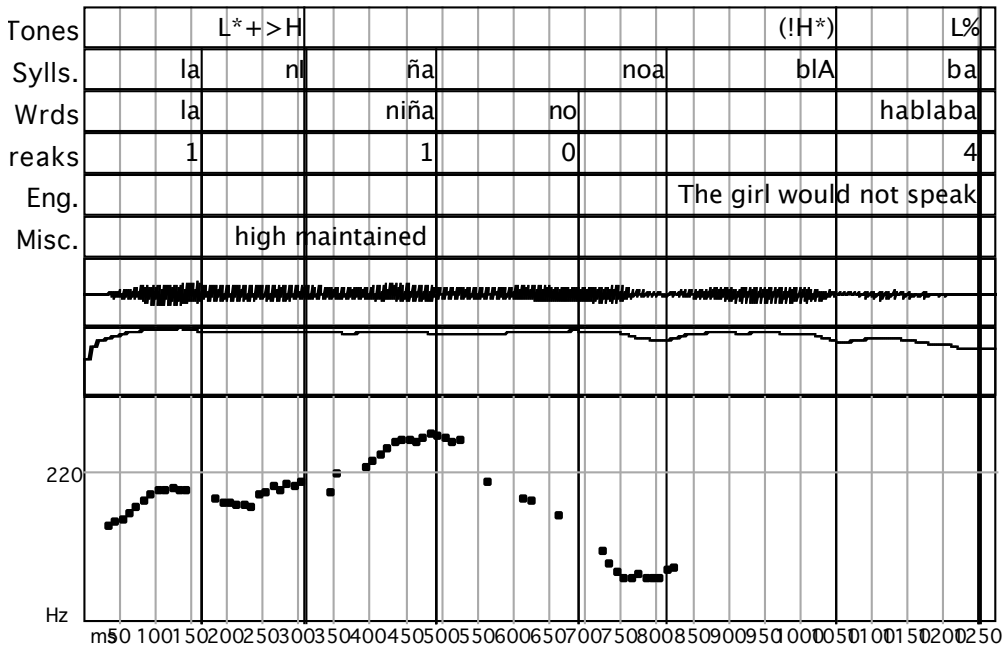

Figure 6.7
Broad focus sentence with tone lapse realized by a Mexican-American speaker. Pitch track showing the use of the L*+>H bitone.

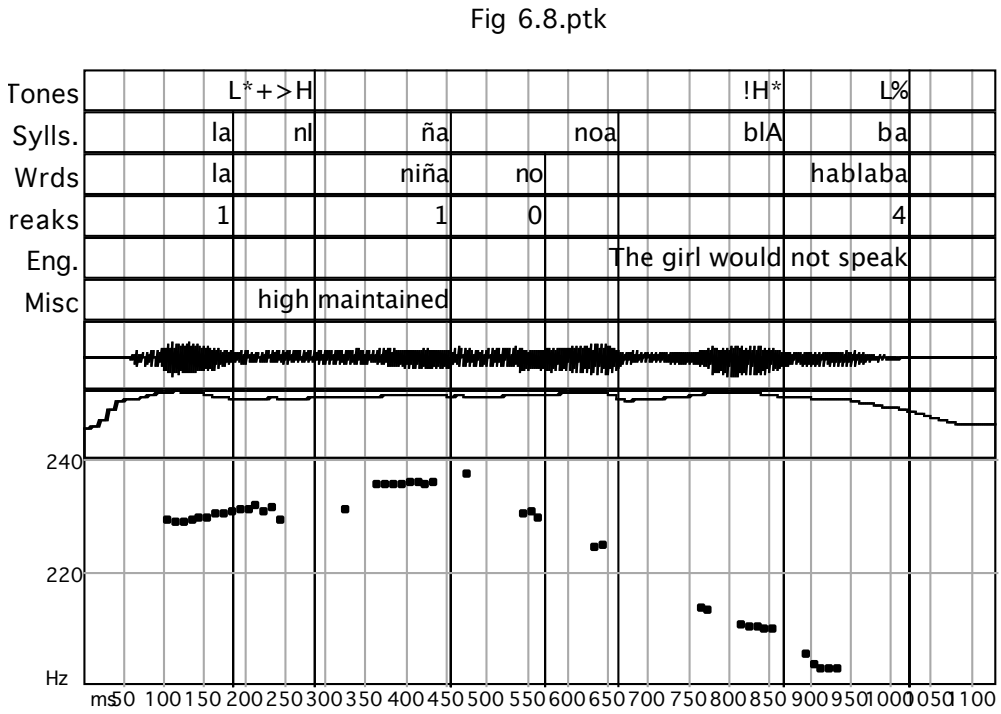

Figure 6.8
Broad focus sentence with tone lapse realized by a Mexican-American speaker. Pitch track showing the use of the L*+>H bitone.

3.4 Pre-nuclear Pitch Accents in Declaratives with Focus

In Alteño Spanish, one alternative for marking focus in declaratives is by increasing the pitch of the stressed word by means of the bitone L+H*. In Chicano Spanish, the same bitone is used to focus words. However, the degree of deaccenting following the focused word in the Chicano data is much more aggressive than that of the Mexican data. Tones following the focused word are difficult to hear and to see in the pitch track (represented by ?). The two figures below exemplify this pitch reduction phenomenon.

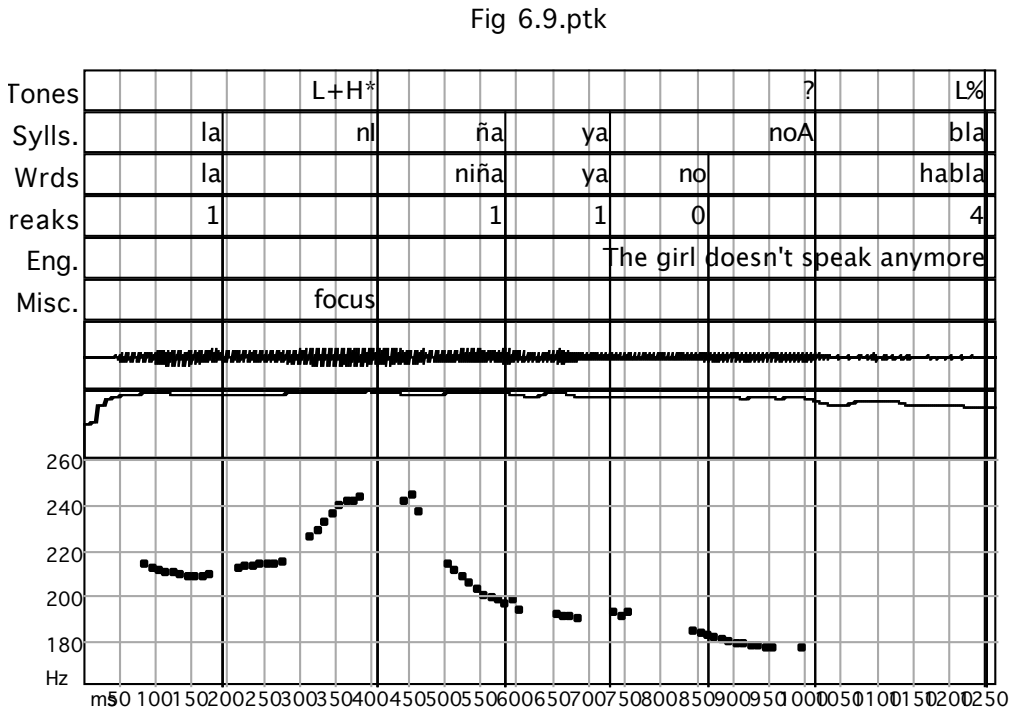

Figure 6.9
Narrow focus sentence read by a Mexican-American speaker. The bitone L+H* is used. The material after the focused is deaccented.

Figure 6.10.ptk

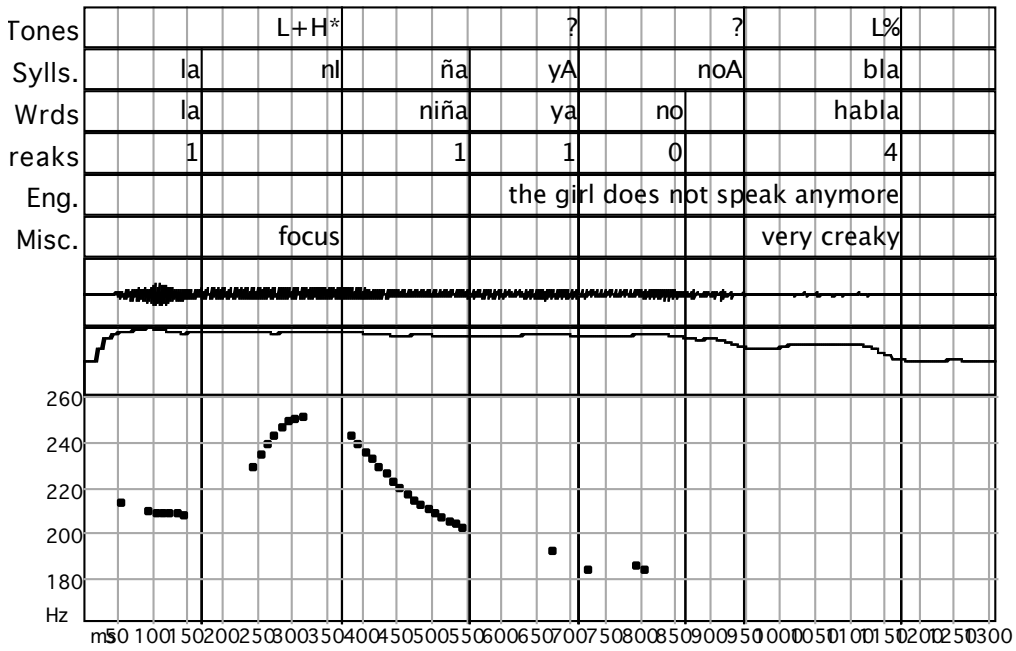

Figure 6.10
Narrow focus sentence read by a Salvadoran-American speaker. The bitone L+H* is used. The material after the focused is deaccented.

L+^H* and H* (!H*) are two other focus tones employed in Chicano Spanish. Examples of these patterns are seen below in figures 6.11 and 6.12.

Figure 6.11.ptk

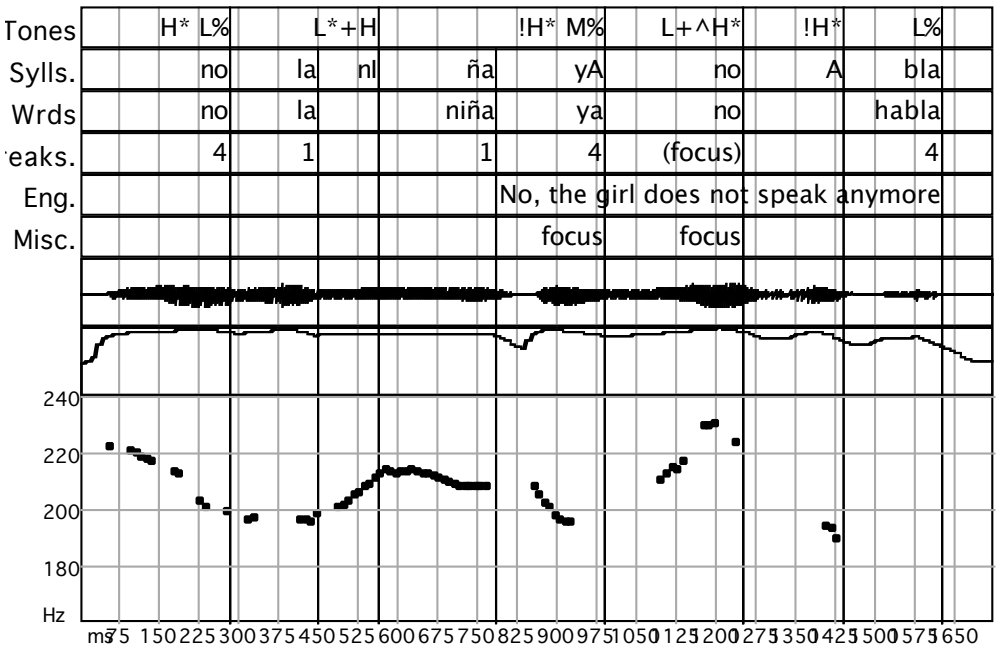

Figure 6.11
Narrow focus on two words. The sentence was read by a Salvadoran-American speaker. !H* is used for the first focused word, which is followed by a pause. This is to be expected as this is the nuclear pitch accent of the phrase and as it is in a tone clash environment. L+^H* is used for the second focused word.

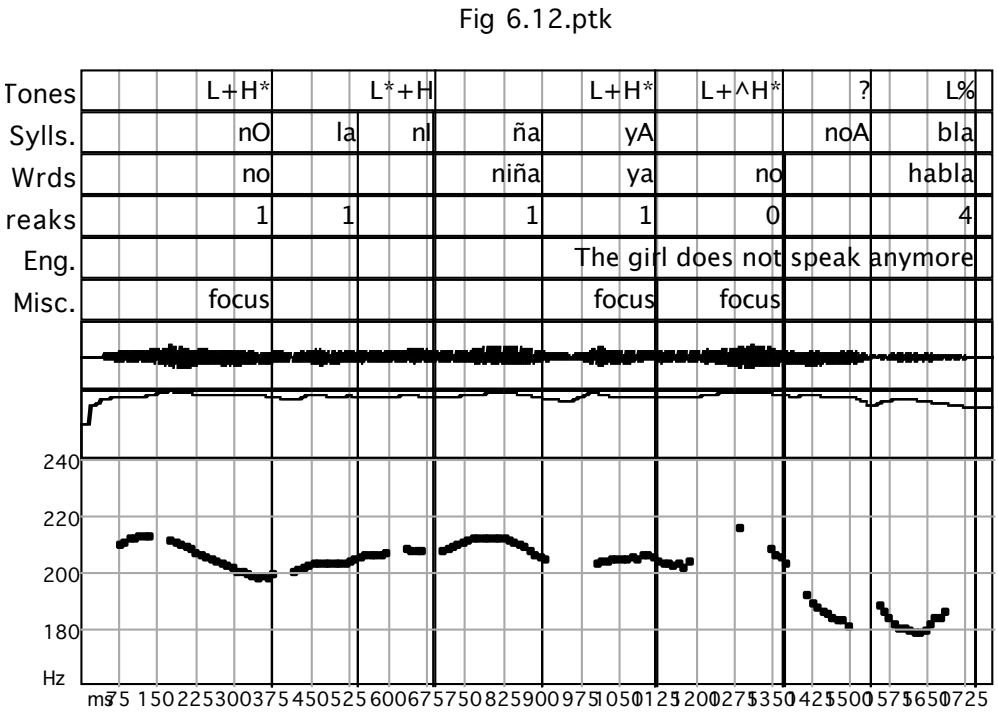

Figure 6.12
Narrow focus on three words. The sentence was read by a Mexican-American speaker. L+H* is used for the first two focused words. L+^H* is used for the second focused word.

Focus is also made possible by rearranging the order of sentences through topicalization. Topicalized sentences were not elicited from the speakers who participated in this study.

3.5 Nuclear Pitch Accents

In Mexican Spanish, the nuclear pitch, the strongest tone in the phrase, is consistently H* but is mostly realized as !H* as it is almost always found as the last tone in a series of tones. The Chicano Spanish data analyzed for this chapter suggest the same nuclear pitch accent realization as Mexican Spanish (see nuclear pitch accents in figures above). Although the nature of the nuclear pitch accent is very difficult to see (and sometimes to hear) due to phrase final phenomena such as devoicing and creaky voice, this dissertation found (!)H* to be the nuclear

pitch accent for Chicano Spanish. A few examples of the difficulty in deciphering what the nuclear pitch accents are can be appreciated below, in figures 6.13 to 6.15.

Fig 6.13.ptk

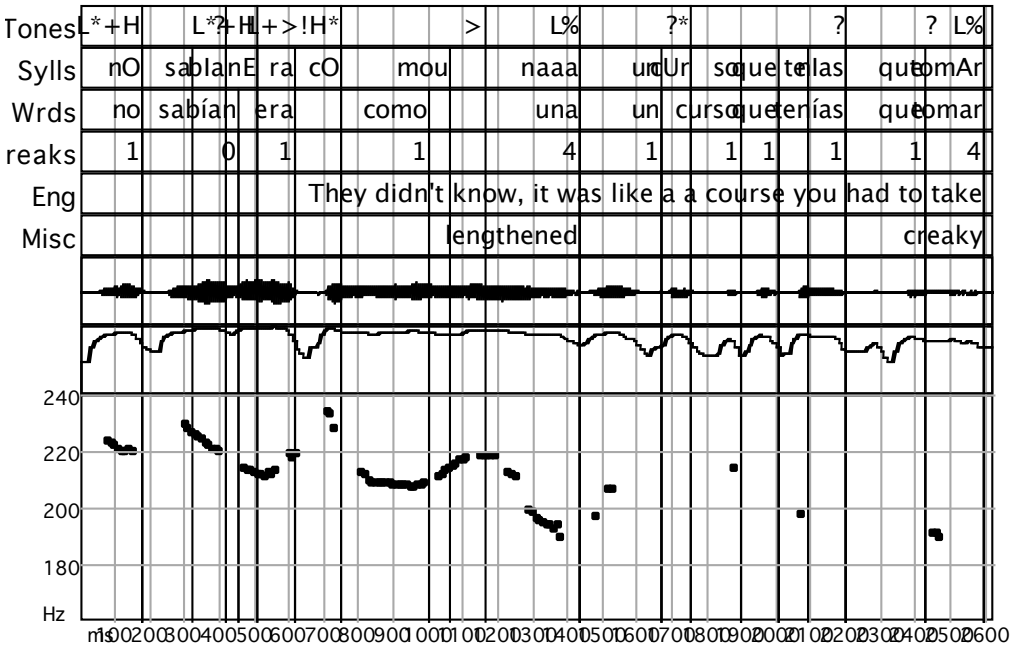

Figure 6.13
Naturalistic data pitch track reproduced here to exemplify the difficulty in seeing the nuclear pitch accent in intonational phrases. This was a sentence spoken by a Mexican-American informant.

Figure 6.14.ptk

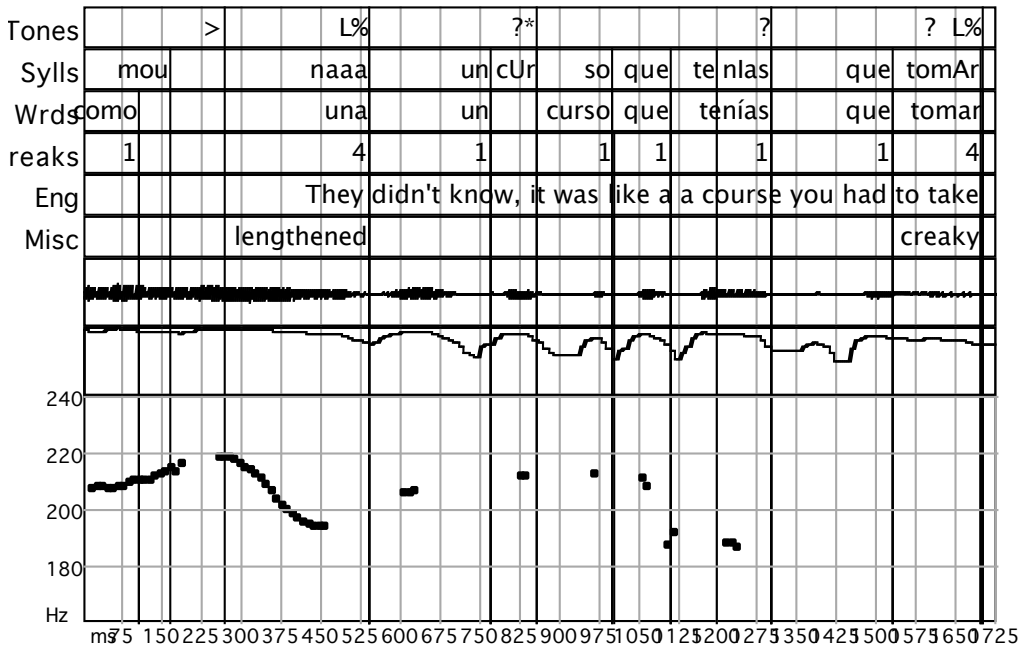

Figure 6.14
Expanded view of last section of figure 6.13. This is reproduced here to exemplify the difficulty in seeing the nuclear pitch accent in intonational phrases.

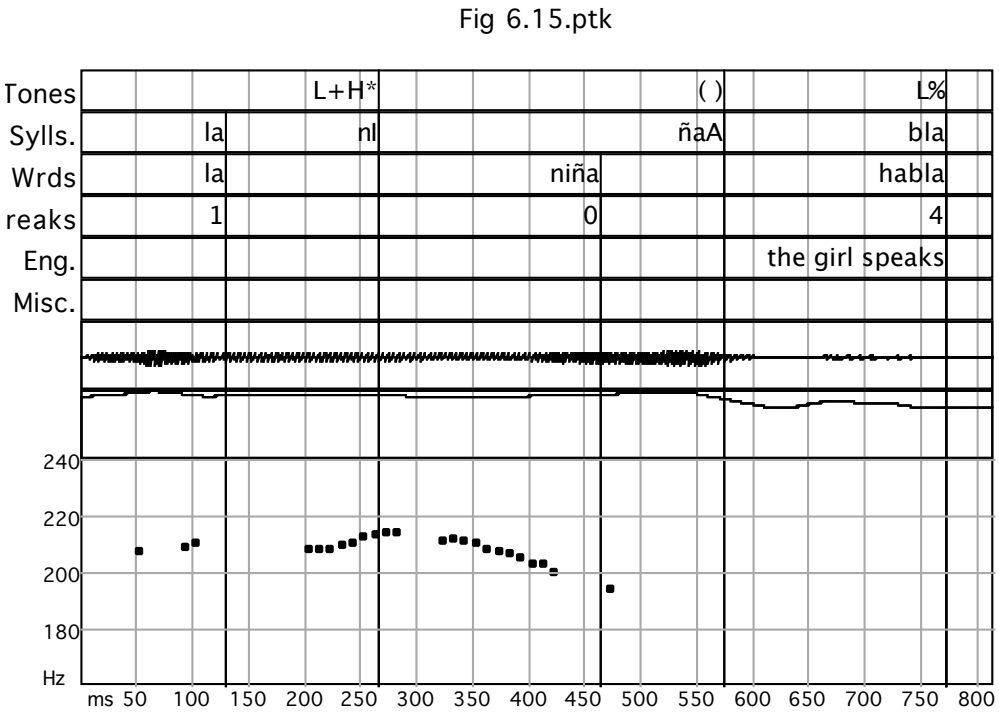

Figure 6.15
Naturalistic data pitch track reproduced here to exemplify the difficulty in seeing the nuclear pitch accent in intonational phrases. This was a sentence spoken by a Salvadoran-American informant.

In addition to the already discussed H* and !H* nuclear pitch accents, L*, L+H*, and L+^H* are also possible nuclear pitch accents in this dialect. L* is reserved as the nuclear pitch accent used for questions with focus, where the lowering of the contour works against the almost accentless pattern of the interrogative phrase (see figure 6.16 below).

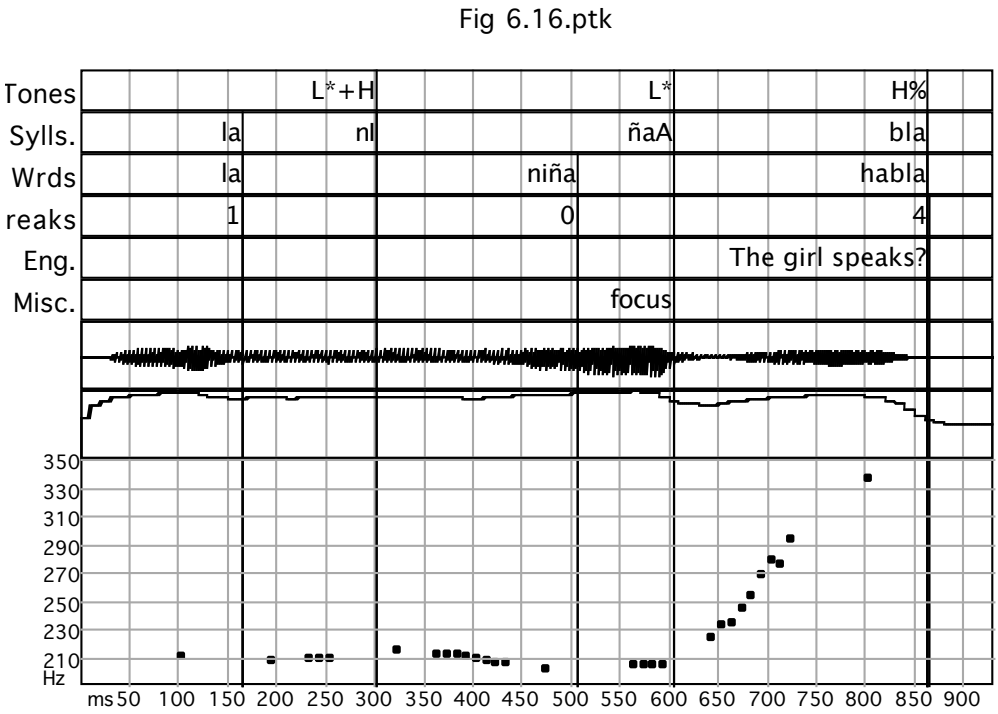

Figure 6.16
Use of L* as a nuclear pitch accent. This is a nuclear pitch accent used for questions with focus. This token was produced by a Salvadoran-American speaker.

3.6 Interrogatives

Two significant pitch events are characteristic of Chicano Spanish interrogatives. First, in wh-questions, the predictable pattern is characterized by a downtrend, with focus on the wh-word that is used to obtain new information (which is marked by the bitone L+H*)[235]. Second, in Chicano Spanish, a general unaccented downtrend pattern is appreciated after the initial focus bitone (the wh-word). Figures 6.17 and 6.18 show wh-questions produced by Mexican-American and Salvadoran-American speakers. As can be appreciated, this contour is completely different and unlike the pattern evidenced for Mexican Spanish in the last chapter, which is uptrend. In

[235] In Mexican Spanish, the predictable pattern for wh-questions was characterized by an uptrend.

short, Mexican Spanish uses L* to mark contrast in its uptrend question contour while Chicano Spanish utilizes L+H* to contrast against its downtrend question pattern.

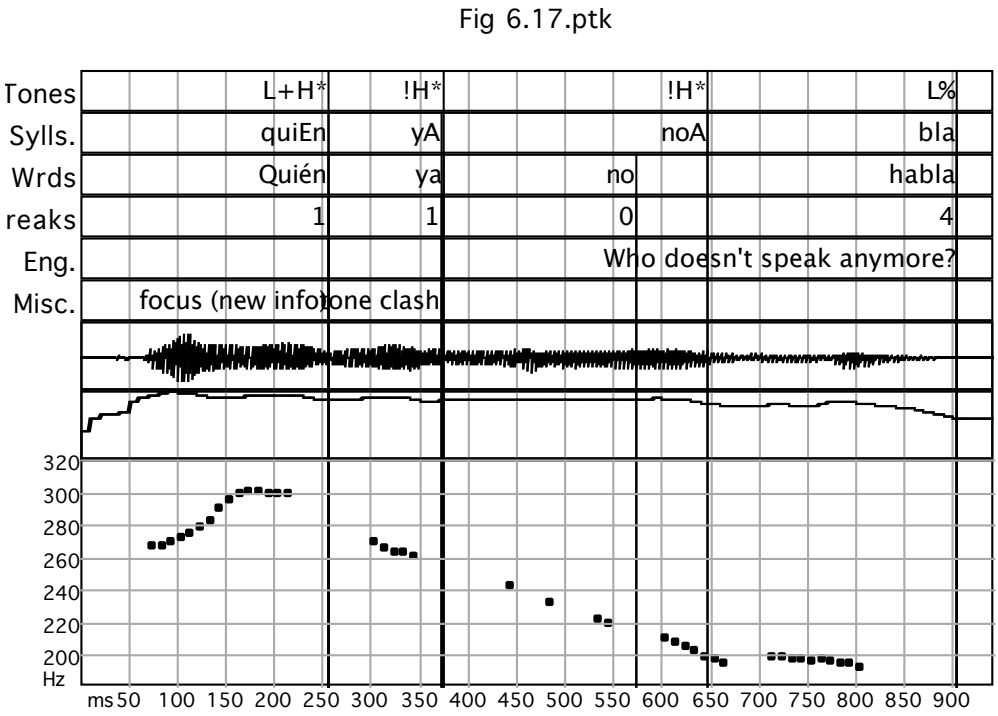

Figure 6.17
Wh-question produced by a Mexican-American speaker. The wh-question word is focused (marked by L+H*). A generalized pitch downtrend and deaccenting pattern is also appreciated.

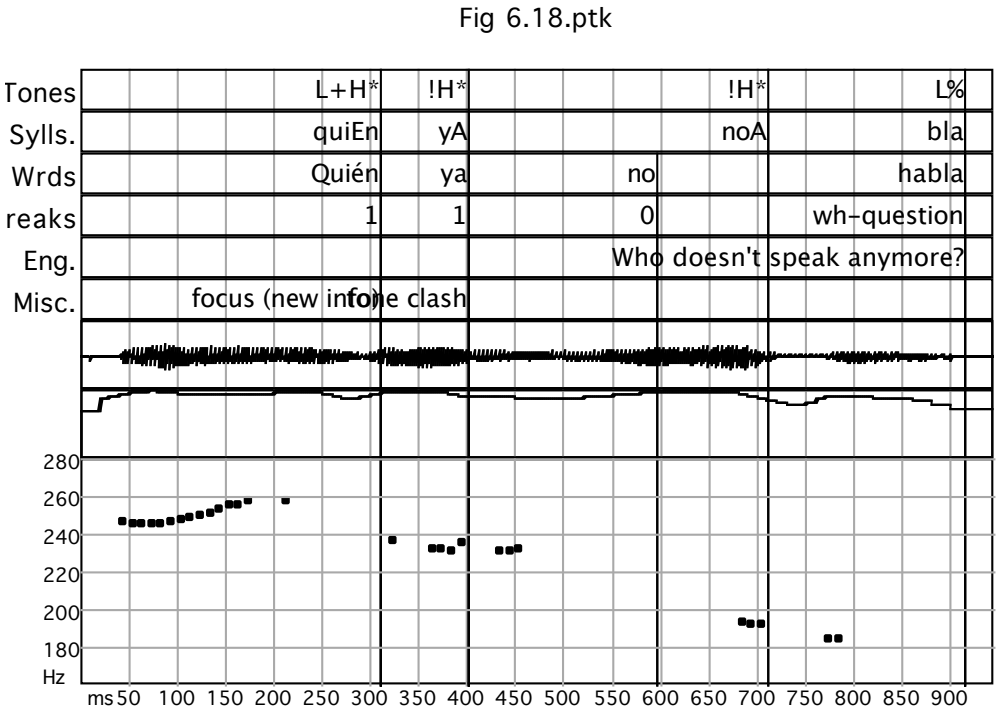

Figure 6.18
Wh-question produced by a Salvadoran-American speaker. The wh-question word is focused (marked by L+H*). A generalized pitch downtrend and deaccenting pattern is also appreciated.

The second interrogative pattern, appreciated in echo questions and yes-no questions, is characterized by a flattened contour that is raised significantly at the boundary tone (discussed in the next section). This is similar to Mexican Spanish (see figure 5.2 in the previous chapter). Focus in echo questions and in yes-no questions is marked by contrasting against the flattened pitch by means of the monotone L* (in the case of the nuclear pitch accent) or by means of the L+H* bitone (in the case of the pre-nuclear pitch accent). Figures 6.19, 6.20, and 6.21 below show this pattern.

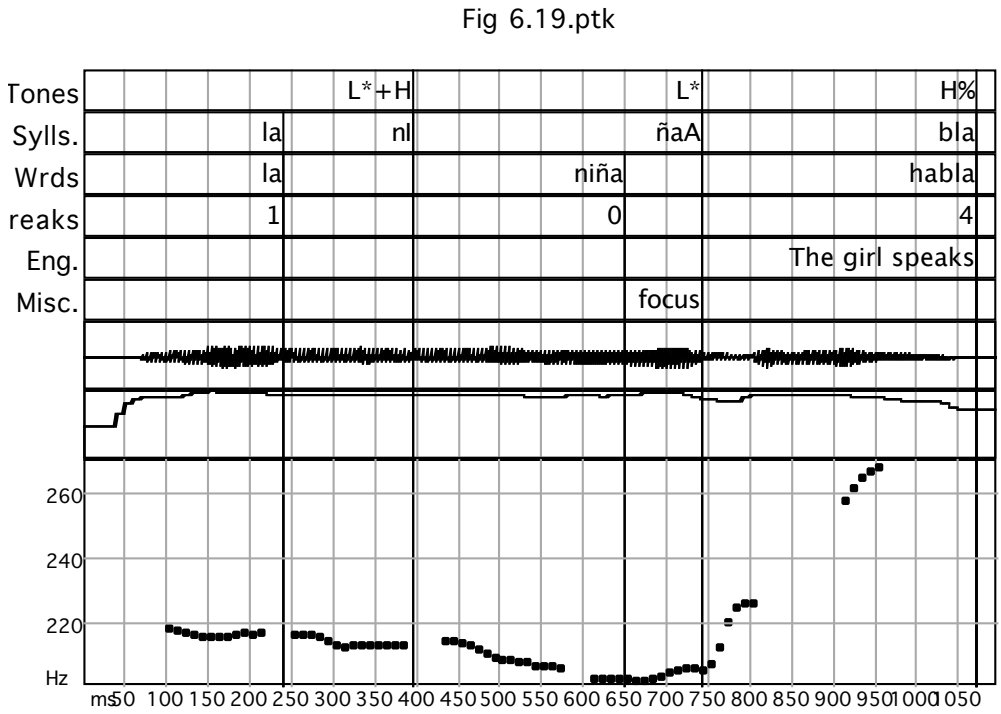

Figure 6.19
Echo-question produced by a Mexican-American speaker, characterized by a flattened contour, the focus dip L* and a high rise at the end.

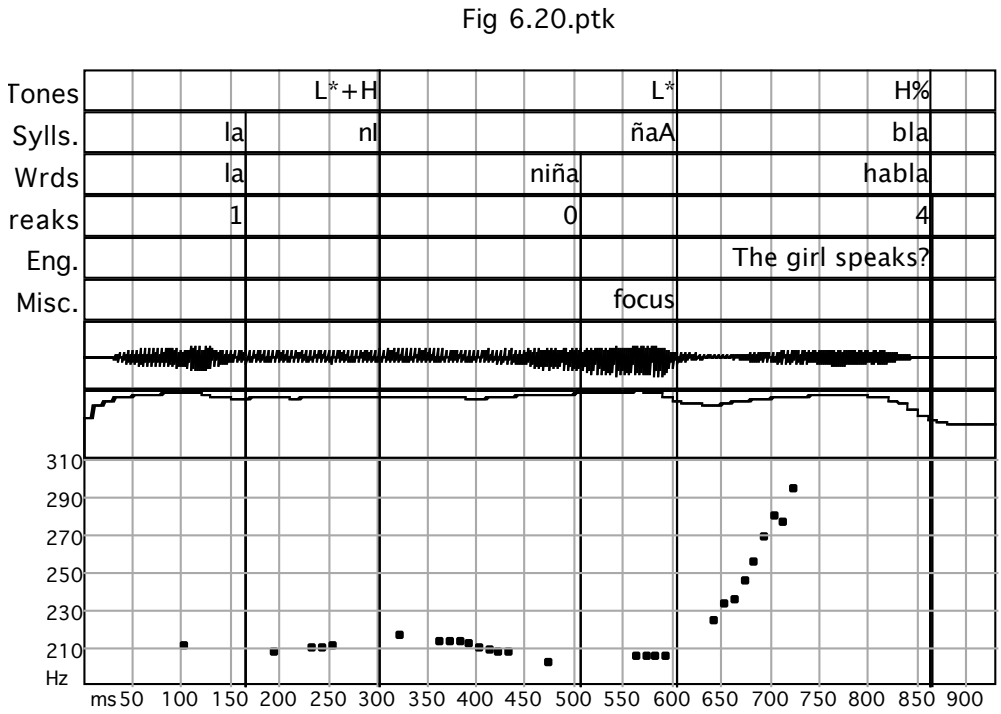

Figure 6.20
Echo-question produced by a Salvadoran-American speaker, characterized by a flattened contour, the focus dip L* and a high rise at the end.

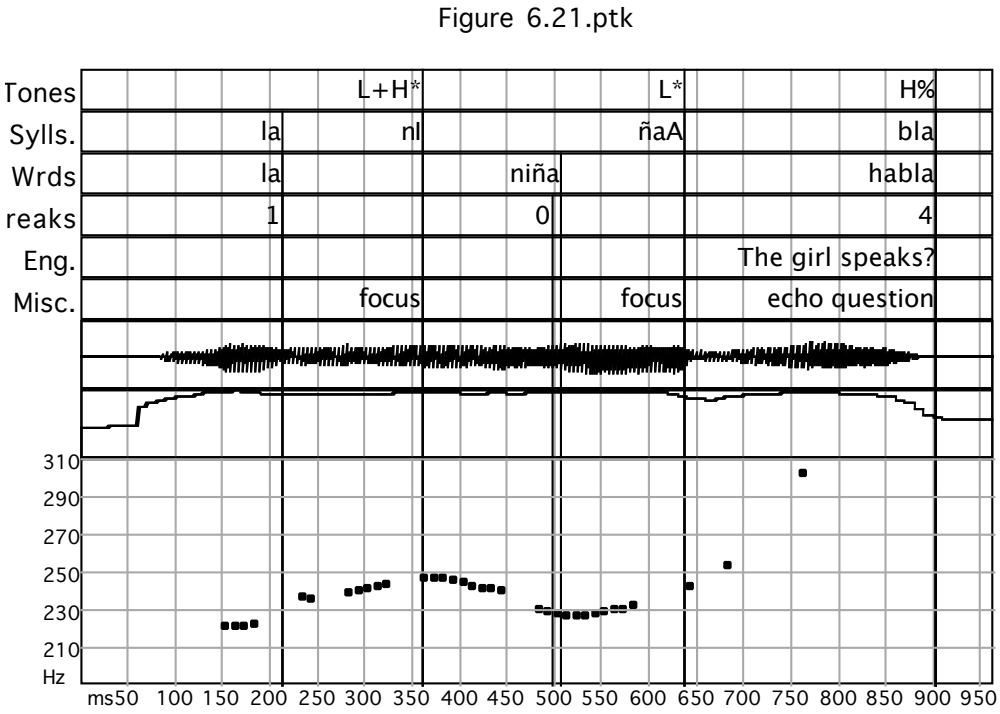

Figure 6.21
Echo-question produced by a Mexican-American speaker with two focused words, marked by L+H* (quick rise) and L* (quick dip) and a high rise at the end.

3.7 Boundary Tones

L% (low), H% (high) and M% (mid) boundary tones characterize the dialect. The reader will recall that Mexican Spanish was characterized by having only two boundary tones, L% (low) and H% (high). This dissertation's data asserts that for Chicano Spanish, L% occurs at the end of statements (see all declaratives in the previous sections) and wh-questions (see wh-questions above), while H% occurs at the end of echo and yes-no questions (see figure 6.21 above) as well as in cases of continuation rise[236] (see figure 6.22 below).

[236] A rising boundary tone is used in statements, particularly in naturalistic data, to show that the utterance is incomplete or that the speaker intends to add information (see Figure 6. 22 above).

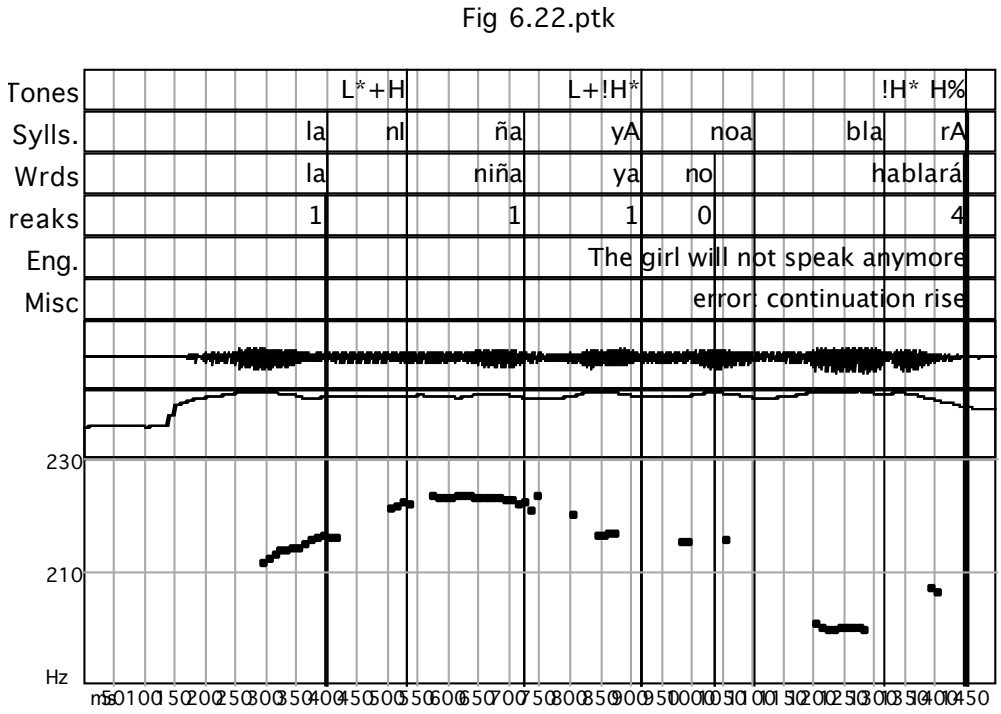

Figure 6.22
Example of a continuation rise. Sentence spoken by a Mexican-American speaker.

M%, which is unique to this dialect, occurs regularly in naturalistic data, to which we now turn.

4. Naturalistic Speech Data

4.1 Some Challenges

Naturalistic data presents a challenge for any investigator. The most significant challenges of using naturalistic data in this investigation include issues introduced by the experimental design proper and by the participants themselves.

The experimental design gathered data with background noise, overlapping utterances, and extensive use of the English language. The study's participants were asked to carry around a digital recording device that saved their interactions, many of which took place in public spaces,

which made the selection of clean tokens difficult due to background noise. In addition, utilizing naturalistic data implies gathering language in context, which means analyzing data that comes from interactions with other speakers. This results in many instances of interrupted or overlapping utterances, which also made clean tokens difficult to locate. Lastly, due to the fact that the speakers of interest to this investigation were United States-born English-Spanish bilinguals, a majority of the naturalistic data gathered was English-language data, not Spanish. In a naturalistic setting, most speakers of Chicano Spanish prefer interacting in English, even when they know their interlocutors speak Spanish. In selecting the data for this dissertation, this last factor translated into many hours of combing through the data in order to find a complete or semi-complete utterance that could be analyzed.

Other complexities inevitably introduced by the use of naturalistic data include participants engaging in false starts, stuttering, retractions, corrections, and other speech events driven by the context. These features of natural speech make it difficult to find tokens that can be easily extracted and analyzed.

In spite of these difficulties, **all** descriptive linguistic studies should include naturalistic data in their analysis. Linguistic experimental design limits our study of language as it is impossible to gather data without directly influencing the behavior of the participant. Whether it is by the use of a microphone, a computer screen, or a script, gathering linguistic data limits natural speech production. By complementing traditional linguistic design with data-gathering mechanisms that allow the speaker to produce natural speech (as has been done in this dissertation), this investigation attempts to present an accurate description of the current status of Los Angeles Chicano Spanish as a living language, as a dynamic tool in social interaction.

4.2 Results

4.3 General Observations

The naturalistic data overwhelmingly confirmed the findings gathered in the scripted data. L*+(!)H was the default pre-nuclear pitch accent and (!)H* was the default nuclear pitch accent. Focus was marked by the use of the bitone L+H* only. The bitone L*+>H, the pitch accent with the delayed H realization, was used in cases of tone lapse. However, a sustained H triggered by toneless space was more apparent in the naturalistic data than in the scripted data. Tone clash was difficult to analyze in naturalistic data as the data that contained this phenomena was in pitch tracks that were difficult to see. Rate of speech is an important determinant in naturalistic data since pitch tones will be more crowded in naturalistic speech than in scripted speech. Thus, tone crowding was more common in these data. Preliminarily, it was found that L+H* was used in cases of tone clash. H% and L% were productive boundary tones in the naturalistic data. H% was used more frequently in the naturalistic data than in the scripted data since continuation rise is very common in natural speech. M% was also very common in the Chicano Spanish data analyzed, a boundary tone that was not appreciated in the Chicano Spanish scripted speech or in the Mexican Spanish data (both scripted and naturalistic).

As mentioned at the beginning of this chapter, one of the distinctive features of Los Angeles Chicano Spanish found in the scripted data was the overall reduced contour space, which was about 50 Hertz (see Figures 6.1 through 6.4 above). The average range for scripted data among Mexican speakers was 100 Hertz (see previous chapter). The naturalistic data analyzed evidenced a pitch range for Chicano Spanish that is more analogous to that found for Mexican speakers. That is, in naturalistic speech, the reduced pitch contour found for Chicano Spanish participants in the scripted data was not evidenced.

4.4 General Patterns

Figure 6.23 shows a representative naturalistic sentence. Because these utterances are long, it is difficult to see the coded pitch accents. Parts of pitch track 6.23 have been reproduced in figures 6.24 and 6.25 to help the reader see the pitch track.

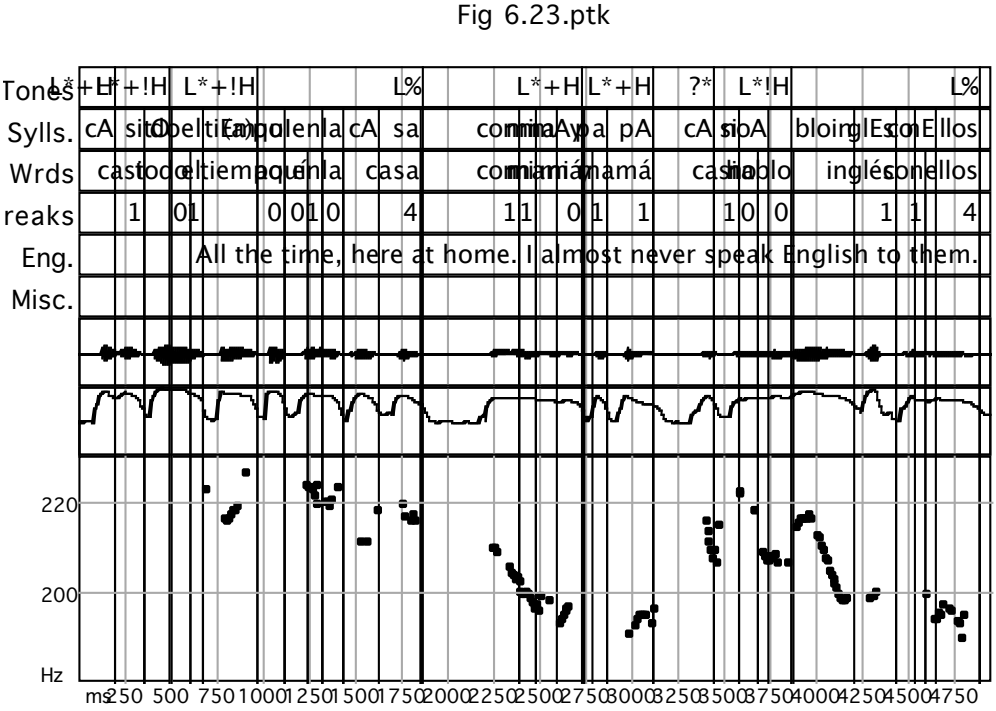

Figure 6.23
Utterance spoken by a Mexican-American speaker. As expected, a general low high pattern that progressively downtrends characterizes the utterance. (*Casi todo el tiempo. Aquí en la casa con mi mamá y mi papá. Casi no hablo inglés con ellos.* Almost all the time. Here at home with my mom and dad. I almost never speak English to them.)

Fig 6.24.ptk

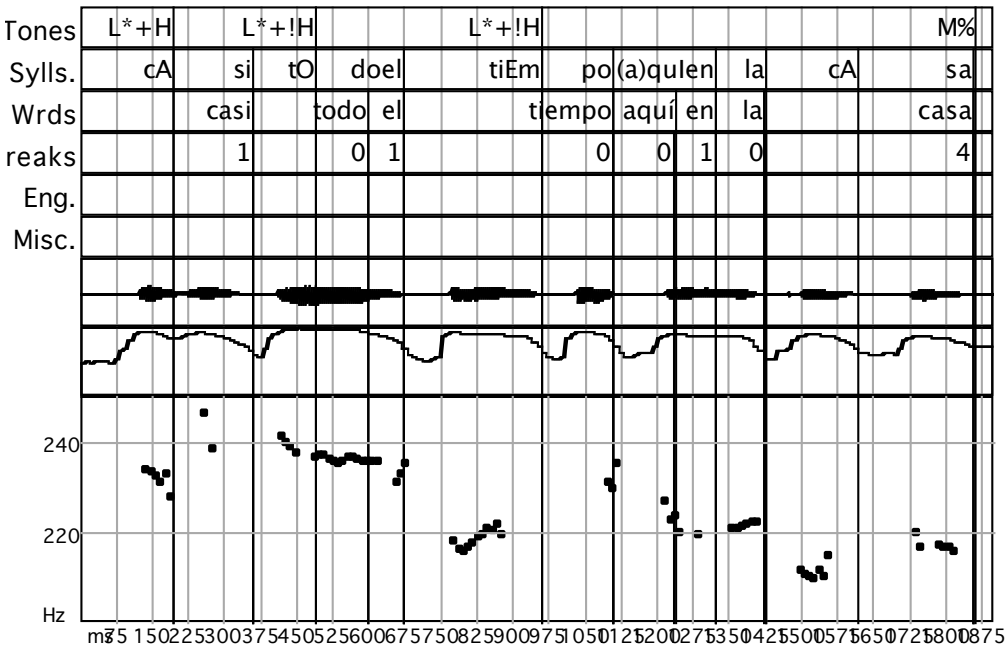

Figure 6.24
Part of the naturalistic utterance spoken by a Mexican-American speaker presented above, figure 6.23. As expected, a general low high pattern that progressively downtrends characterizes the utterance. The M% is clearly seen in this figure.

Fig 6.25.ptk

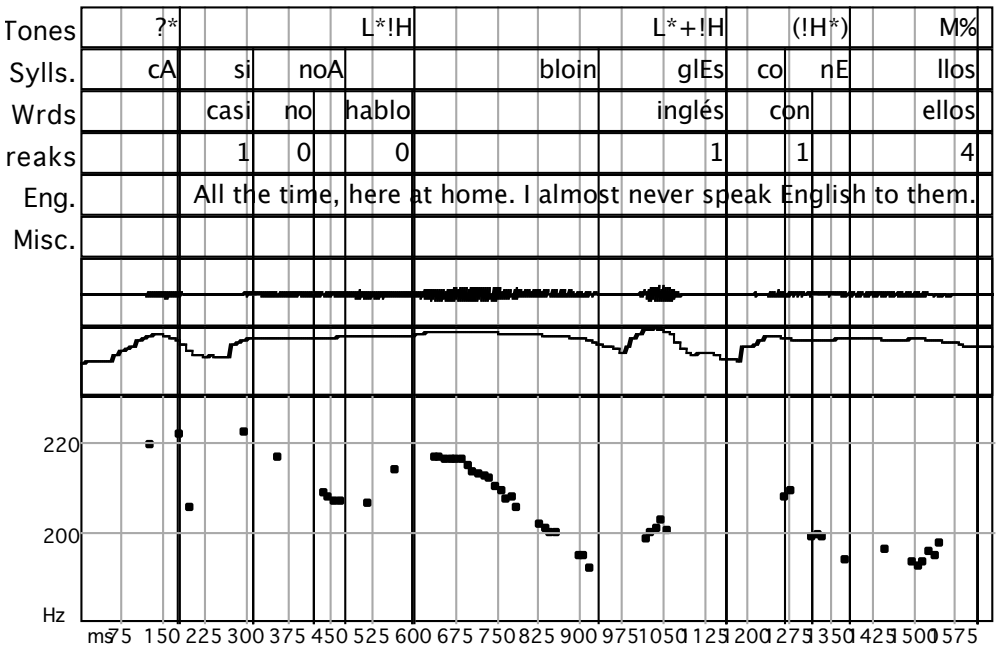

Figure 6.25
Part of the naturalistic utterance spoken by a Mexican-American speaker presented above, figure 6.23. As expected, a general low high pattern that progressively downtrends characterizes the utterance. The M% is clearly seen in this figure.

The overall pattern of the sentence is L*+H L*+!H is again appreciated in figure 6.26 below.

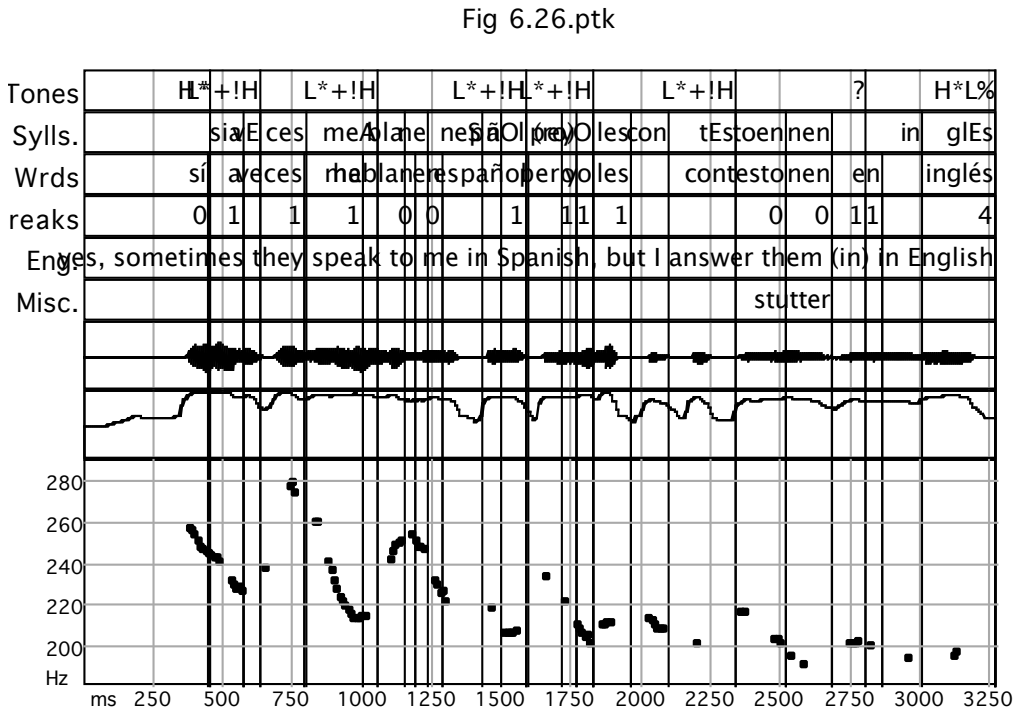

Figure 6.26
Utterance spoken by a Mexican-American speaker. As expected, a general low high pattern that progressively downtrends characterizes the utterance.

Figure 6.27 below is a pitch track of a shorter natural utterance, which makes the coded tone trajectory easier to appreciate.

Fig 6.27.ptk

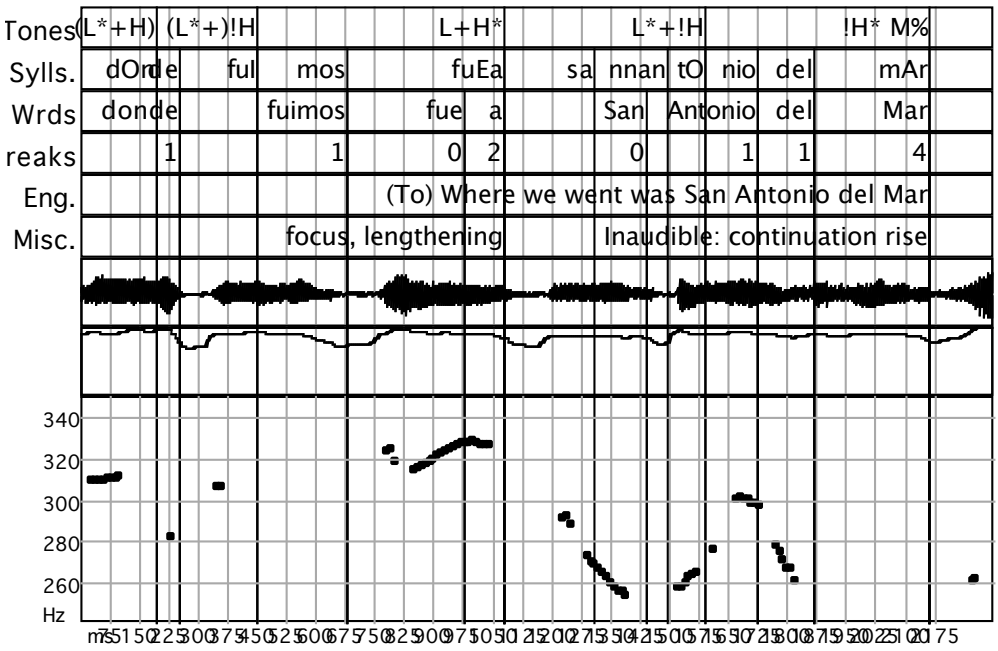

Figure 6.27
Utterance spoken by a Salvadoran-American speaker. As expected, a general low high pattern that progressively downtrends characterizes the utterance.

In this pitch contour, L*+H is followed by L*+!H, and the L+H* pitch appears in the middle of the phrase as the word *fue* (he/she went) was lengthened and focused. The expected nuclear pitch accent !H* appears at the end of the phrase. A continuation rise marked by the boundary tone H% ends the phrase.

The delayed bitone L*+>(!)H created by tone lapse in the scripted data is also appreciated in the naturalistic data. Figure 6.28 below begins with the expected L*+H bitone, followed by the delated L*+>!H, created by the toneless space between the syllable prA of *comprado* and the syllable lO of *elotes*. A unique tone lapse solving technique can be appreciated in Figure 6.29. Here, the bitone L*+>H is employed along with a long sustained high.

Fig 6.28.ptk

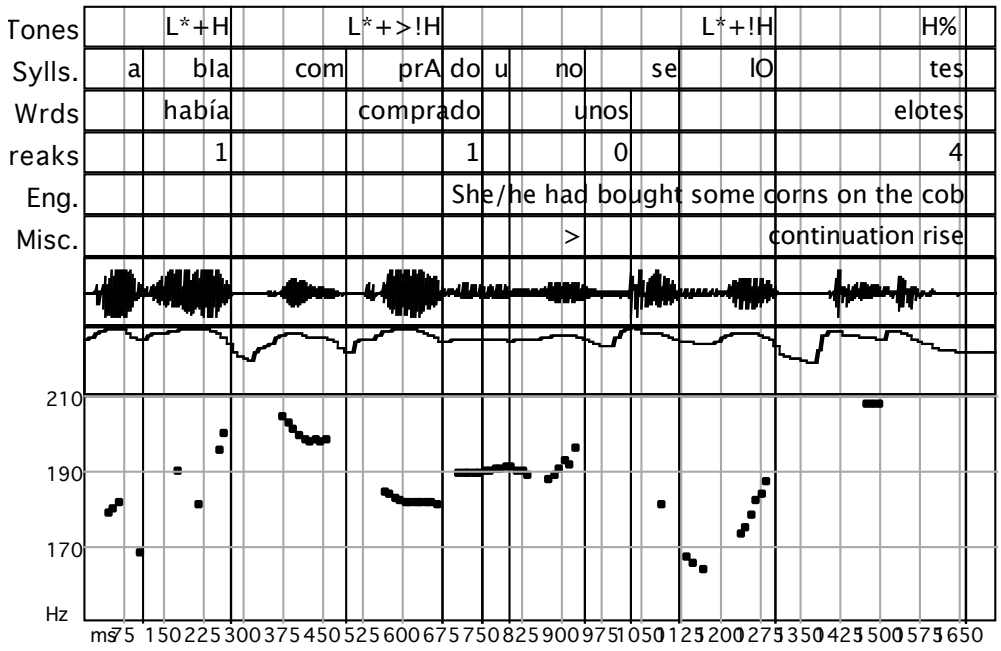

Figure 6.28
Utterance spoken by a Salvadoran-American speaker. A delayed H is triggered by the toneless space in the sentence.

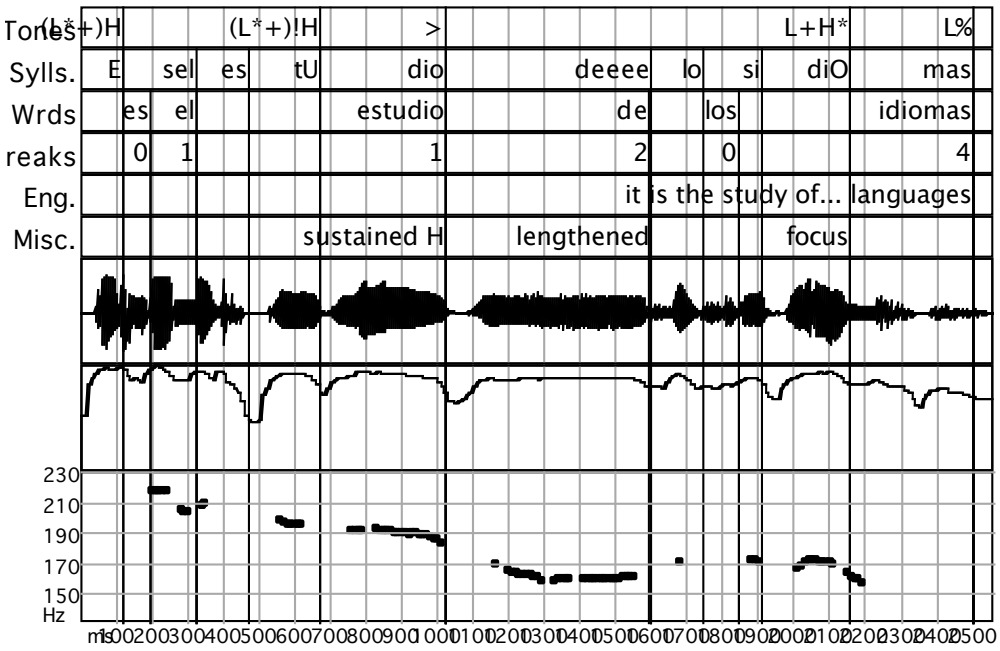

Figure 6.29
Utterance spoken by a Salvadoran-American speaker. A delayed H is triggered by the toneless space in the sentence (the syllables tU. dio. deee. lo. si. diO). The high is realized as a sustained H.

Naturally occurring tone clash was difficult to see. The following figure shows one tone clash resolution by means of the L+H* bitone.

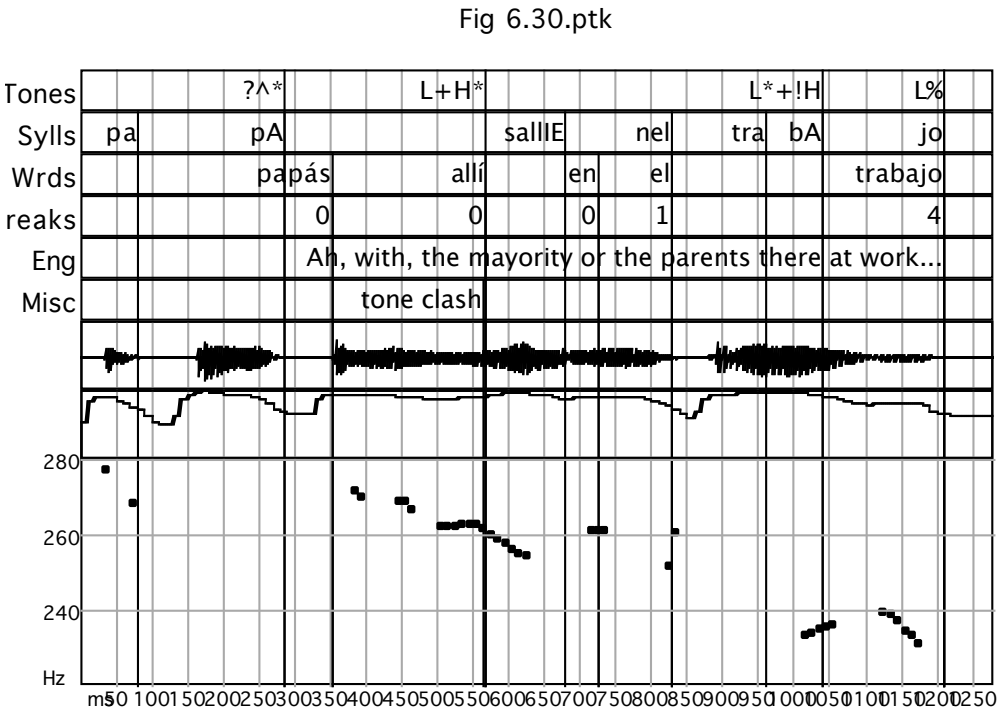

Figure 6.30
Utterance spoken by a Mexican-American speaker. Tone clash is caused by two adjacent stressed syllables. L+H* is used.

5. Conclusion

This chapter has briefly explored important intonational findings relating to the Spanish spoken by Los Angeles Chicano Spanish speakers. In general, especially in scripted data, the tonal patterns of Chicano Spanish were found to be predictable.

The findings for the Chicano Spanish data indicate the following: 1) The default pre-nuclear pitch accent is L*+H (L*+!H). 2) The nuclear pitch accent in declaratives is H* (!H*) and L* in interrogatives. 3) In utterances with narrow focus and default word order, pauses are not commonly utilized to focus. Instead, L+H* is used (followed by deaccenting). Alternatively, L+^H* (followed by deaccenting) or !H*, a truncated version of one of the tones, is used. 4) The boundary tones are H%, and L% or M%. 5) Phonological events such as tone clash and tone

lapse shape the intonational excursion. Tope lapse employs L*+>H (L*+>!H) while tone clash uses H* (!H*).

The following table summarizes the findings for Chicano Spanish presented in this chapter as well as those presented in chapter 5 for Mexican Spanish in an effort to evidence, in a clear and concise manner, the melodic features that define Chicano Spanish (Los Angeles Spanish). Key differences have been bolded. The reader is asked to consult the chapter for an explanatory exposition of this summary.

Dialect	**Pre-Nuclear Pitch Accents**	**Nuclear Pitch Accents**	**Boundary Phrase Boundaries**
Mexican Spanish Los Altos (Andrade, 2012)	L*+H L*+!H L*+>H L*+>!H L+H* L+^H* L*+^H L*	H* !H* L* **L+H*** **L+^H***	L% H%
Chicano Spanish Los Angeles (Andrade, 2012)	L*+H L*+!H L*+>H L*+>!H L+H* L+^H* L* **H*** **!H***	H* !H* L*	H% L% **M%**

Table 6.1 Summary of differences between dialects

Dialect	Other observations
Mexican Spanish Los Altos (Andrade, 2012)	• **Wider contour in scripted sentences (100 Hertz+)** • Optional Pause after focus (common technique) • **Wh-questions are characterized by uptrend (H%)** • Continuation rise not widely used
Chicano Spanish Los Angeles (Andrade, 2012)	• **Reduced contour in scripted sentences (50 Hertz+)** • No pause after focus (pause never produced in scripted data) • **Wh-questions are characterized by downtrend (L%)** • Continuation rise widely used

Table 6.2 Other intonational observations

Chapter 7

CONCLUDING THOUGHTS

Following a strong and long-standing tradition of dialectal research, the present dissertation started by providing a comprehensive survey of Chicano Spanish and of Mexican Spanish dialectal research from an IPA-driven[237] framework. By interpreting the *hispanista* research about the Spanish of Mexico and the Southwest, this dissertation aims to help the scholar interested in these varieties to become familiar with the scholarship published to date. Then, Los Altos Mexican Spanish intonation was investigated as a comparative tool to understand the melodic structure of Los Angeles Chicano Spanish. Los Angeles Chicano Spanish intonation was presented thereafter. This investigation showed that the melodic make up of the Los Angeles Chicano Spanish vernacular is different than that of its Mexican Spanish baseline in important ways.

The findings presented in this dissertation provide new applications of modern linguistic models (the ToBI framework) to answer long-standing language-contact questions (the existence of language contact varieties). The most important resolved issue resolved in the pages of this dissertation has been to evidence the existence of a Los Angeles Chicano Spanish vernacular. To the extent that both the Salvadoran American and the Mexican American participants of this study utilized a neutralized intonational repertoire that was categorically different from the

[237] IPA stands for International Phonetic Alphabet.

Mexican (and from the Salvadoran) Spanish baseline, this dissertation provides strong evidence for the existence of a Los Angeles Chicano vernacular[238].

Spanish has been important to Los Angeles since 1769, almost one hundred years longer than English. Today, almost half of all Los Angeles residents report speaking Spanish. Thus, a study that can help us better understand this variety is not only fitting but is long overdue.

[238] The author interviewed a Salvadoran informant in order to gather an impressionistic understanding of this dialect's intonation.

APPENDIX 1

Many studies that focus on the bilingual (Spanish-English) population of the United States center their research on sociolinguistic and language contact phenomena such as codeswitching, loan-word use, language attitudes, etc. Until now, this dissertation has ignored such lines of research in its analysis of the data, however interesting or fruitful. The last chapter of this dissertation wishes to briefly engage in an analysis of Chicano Spanish in its social context by exploring the act of codeswitching.

The large body of literature on codeswitching is usually concerned with defining the phenomena or with characterizing its systematicity. This section is not concerned with defining the continuum of bilingual speech phenomena termed codeswitching. In addition, this chapter will not explore the rule-system that guides codeswitching. The reader is asked to consult the works of Poplack (1982), Lipski (1985), and Sankoff & Poplack (1981) to read about the importance of the aforementioned lines of research. Instead, this chapter will focus on the performance of codeswitching as a mechanism for highlighting and resolving conflict.

This brief study will focus on a few key segments of conflict and disagreement in the data collected. This data sub-set was selected because it had the largest number of audible participants. Since each added interlocutor increases the complexity of the interaction, such interactions provide more opportunities for codeswitching. In total, fifteen one to two minute segments were studied. Three have been transcribed and analyzed in this exploration. This brief study will show that, when choosing to speak Spanish or English, these participants not only "know the difference" in the Zentella sense (1997, p. 107), but they also use the mixing of code

as an intentional and meaningful tool to construct, perform, and resolve conflict and disagreement.

Rampton (1999) and Zentella (1997) analyze switching of language or dialect in terms of *multimodality*. Specifically, multiple codes are used to embody different "identities" according to Zentella (1997) and to mark "style" according to Rampton (1999). In a group, the choice of linguistic code is not passive. A version of the *self* is accessed and performed from interaction to interaction. Unlike many scholars who analyze codeswitching as "a crutch to fill the gaps", Zentella (1997) observes that, in her studies, "switching was primarily an in-group behavior that served as a badge of identity... to accomplish two dozen or more discourse strategies, for example to realign the speaker-hearer relationship via various types of emphasis, clarification, appeal and control" (pg.104). Likewise, Rampton (2003) found and reported that, "in class-stratified societies, the social group stratification of speech is mirrored in style stratification so that [speakers participate in] stylized performances" (p. 50, p. 79). Lastly, the idea of looking at conflict is not new. Gutierrez, Baquedano-Lopez, and Tejada (1999) have an interesting interpretation of communicative interactions involving conflicts. They interpret them as "the catalyst for expanding learning in the Third Space[239]" (p. 292). This "Third Space" is created when "alternative and competing discourses and positionings transform conflict and difference into rich zones of collaboration" (p. 286-7). In the case of the bilingual speakers in this study, "no single language or register is privileged, and the larger linguistic repertoires of participants become tools for participating and making meaning in this new activity." (Gutierrez et al., 1999, p. 293)

[239] The "third space" a creative space that is created out of friction. In the field of education, this idea has been applied to non-traditional learning spaces, it is a productive *third* or alternative space for learning.

Specifically, this study found that Los Angeles Chicano Spanish speakers highlight disagreement and resolve conflict by using the *other* language as part of their conflict-resolution toolkit. The data was analyzed by using a simplified adapted version of the coding system used in discourse analysis. Discourse analysis is used extensively in the field of ethnography of communication (EOC). "Ethnography of communication conceptualizes communication as a continuous flow of information, rather than as a segmented exchange of messages" (Lindlof & Taylor, 2002, p. 44). The ethnography of communication was first established as a field of language study by Hymes (1974). Hymes set out to show that researchers could use his methods to study *communication* systematically. The following coding system was adapted from coding systems presented by Goodwin and Heritage (1990), and used in ethnography of communication research:

Numbers.	Used to segment the transcript. In general, each interaction is assigned their own number.
Initials.	Used to differentiate the speakers in the transcript. The participants names are never disclosed.
(( ))	Used for speech events such as laughter, yelling, etc., for interesting phonological outputs such as length, stuttering, etc., and for other events such as noise, thumping, etc.
[	Used to mark overlap in the transcript. When participant's speech events overlap, the marking "[" specifies where in the utterance the overlap takes place.
Capital Letters.	Syllables that are emphasized or have more prominence in pitch are capitalized in the transcript.
Bold Face.	The language that does not have the floor is notated in bold type.
:	Marks syllable or word length. Multiple markings of ":" code more length (relatively speaking).
< >	Encloses a translation into the English language.

Figure 7.1 Coding system.

The interaction named *bet* (presented in parts below) exemplifies how codeswitching can be analyzed as a conflict-resolving strategy. In this interaction the group of participants is commenting on the consumption of alcohol. The transcribed conversation is the group's response to two of the group members' alignment with disliking alcohol (AEA and JU). The conflict begins when AEA tells JU "tú eres uno de los míos" (*you're one of my kind*) in response to JU's comment, "yo no me pongo así" (*I don't let myself get like that*). By aligning with each other in Spanish, JU and AEA have selected Spanish as the neutral language that has the floor. In this interaction English is the language used to mark misalignment or disagreement. The interaction contains 69 lines, 32 of which contain phrases or words in English (the marked language in this

interaction). The first four lines (See figure 7.2 below) are in the neutral language on the floor: Spanish.

CLIP NAME: *bet*

1. PM: Yo tampoco, eh? <me neither, okay?>
2. *All:* ((laughter))
3. AEA: Ah, Primo:: [tú estas chiquito, eh. ¡Cuidado! <Ah, Primo:: you are young. Careful.>
4. PM: [Quiero decirles. Quiero decirles que ese día:: yo no tomé <I want to tell you, I want to tell you that that day::, I didn't drink.>

Figure 7.2 Interaction: *bet*, part 1. Example of codeswitching as a strategy for conflict resolution.

The first disagreement or misalignment is given in line 5 (see figure 7.3 below), which is in English. Speaker RS does not agree with speaker PM, sarcastically "agreeing" with him in English (the marked language in this particular interaction). Spanish dominates the floor subsequently, in lines 6 to 17. Again, speaker RS takes the floor away from Spanish and highlights disagreement by using English (line 18).

CLIP NAME: *bet*

5. RS: **I know** ((laughter)), **we are proud of** [**you!**
6. AS: [¿No tomaste? <You didn't drink?>
7. JE: ((laughter)) ¡Ay! ¡Ay! ((disbelief))
8. JU: ((laughter)) [¡Ay! ¡Ay! ((disbelief))
9. JE: ((laughter)) [¿No tomo? ((disbelief)) <he didn't drink?>
10. JU: ((noise)) MMH! Mmh! ((in agreement))
11. PM: Bueno, sí tomé, pero no me emborraché. <Well, I did drink, but I didn't get drunk.>
12. JE: ¿PORqué? <BEcause?>
13. RS: ((laughter))
14. PM: Que fue, que fue, que fue:: [ya ya y:: ((very long [i])) <That was, that was...>
15. AEA: [¿Ya es algo?] <That's something?>
16. LI: ((laughter))
17. PM: Ya es algo. <That's something.>
18. RS: ((laughter)) **It is! It is!**

Figure 7.3 Interaction: *bet*, part 2. Example of codeswitching as a strategy for conflict resolution.

This occurs again in lines 19 to 29, where the general discussion takes place in Spanish. As before, speaker RS highlights disagreement by using English in line 29 (see figure 7.4 below), which breaks the flow of the interaction and marks conflict.

CLIP NAME: *bet*

19. JE: ((noise)) Pero di, pero diles cómo estaba, como estaba a:: allá. <But tell, but tell them, how he was over there.>
20. PM: Pero ALLÁ, güey[240], <But, over there, *dude* (derogatory).>
21. AEA: ((inaudible))
22. PM: Desde que... ¿no hicimos la apuesta de, de que te ibas a comer un chile? Un chile jala [peño? <Since... didn't we make that bet that, that you were going to eat a pepper, a jalapeño pepper?>
23. *All:* [((laughter))
24. PM: ¡Los invi, los [invito! <I invite you.>
25. RS: [Hey, ¡no te lo comiste! ((very loud)) <Hey, you didn't eat one!>
26. PM: No ese no, es en Marzo, todaVÍA <No, not that, it's in March, not YET.>
27. RS: Oh, es en Marzo? <Oh, it's in March?>
28. *All:* ((inaudible))
29. RS: ((inaudible)) ¡Ya perdió! <he lost!> **[He already got fucked up.**

Figure 7.4 Interaction: *bet*, part 3. Example of codeswitching as a strategy for conflict resolution.

RS then adopts an interesting strategy; Perceiving that she doesn't have interlocutors who are aligning with her, RS switches back and forth between languages. To continue foregrounding her disagreement, RS vacillates between Spanish and English (lines 29 to 69), even sentence medially (lines 40, 46, 63, 65). Lastly, RS decides to disengage in the interaction altogether and begins to close-up the argument, uttering "whatever" (line 59) and ending with "whatever" (line 69), both in the marked language.

[240] Literally means *ox*. This word can be used as a term of endearment meaning "dude" or as a negative term to mean "fool."

CLIP NAME: *bet*

30. AS: [((laughter))
31. RS: **Right:::?** ((very long))
32. LI: **Yeah.**
33. RS: Ya perdió, ¡qué se lo coma! <he lost, he needs to eat it!>
34. PM: No, yo sé, pero es que, es que él no, ahí yo porque yo, yo soy el que soy más. <but, you see, not him, because it is I, I'm the one who is the most.>
35. AS: [**Huh?**
36. JE: [**Ha!** ((in agreement))
37. RS: Yo sé pero no es que, que. <I know, but isn't it that, that.>
38. JE: Hasta **March**. Hasta Marzo. <'Till March. Until March>
39. RS: Pero, yo, yo, yo sé, pero no quiere que, que, que ((inaudible)) <I know, I, I, I know, but he doesn't want that, that, that>
40. RS: Pero **why?** ((very high pitched)), <But why?>

CLIP NAME: *bet*

41. JE: **What?**
42. LI: ((laughter))
43. RS: **You already lost!**
44. JE: **No:::**
45. JU: **Why?**
46. RS: Se emborrachó, **wasn't that the thing?** <He got drunk, wasn't that the thing?>
47. JU: **No, not him! ((**probably pointing)), **HIM!**
48. RS: Él si puede tomar? <He can drink?>
49. JU: **Yeah! Yeah!**
50. PM: Sí, o sea, ellos dos sí, yo soy el único que no puedo... sí puedo pero no **fuck** ((interrupted)) <Yes, like, they can, I'm the only one who can't... well, I can but I can't get fuck>
51. RS: Pero tú ya perdiste, tu ya perdi... <But, you already lost, you already lo...>
52. JU: **No, not to get, not to get, not to get like, like fuck** ((interrupted))
53. RS: Pero ¿cuántos lo cargaron en, en Perris? ((Inaudible)) <But, how many carried him in Perris?>
54. PM: NO pero es... <No, it's that...>
55. JU: **No, that was after!**
56. RS: **No, that wasn't AFTER!** [**That was before**!
57. JU: [**No, the, the bet, the bet was after that**!
58. AS: ((laughter))
59. RS: [**Whatever!**
60. JU: [**That's why!**
61. PM: [Nosotros tres, nosotros tres hicimos una apuesta. <The three of us, us three made a bet>
62. JE: **Stupid!** ((imitating a woman's voice))
63. RS: Pero eso ya lo habían dicho antes porque **you guys were already talking about it** cuando estabamos allí.
<<But you had said it before, because you all were already talking about it when we were there.>>

64. LI: **It's not that serious.** ((laughter))
65. RS: NO, pero es que... like, **it's TRUE!** <No, but it's just that... like its TRUE!>
66. JE: ((laughter)) **She gets like all mad... "it's TRUE!"** ((imitating a woman's voice))
67. RS: **Hey no, I'm HUNGRY!**
68. AS: **Get the hamster and put it in the frying pan...**
69. RS: **Oh:::, WHATEVER.**

Figure 7.5 Interaction: *bet*, part 4. Example of codeswitching as a strategy for conflict resolution.

The interaction named *bet* above shows instances of clear alignment or misalignment with the speaker who previously had the floor by means of language choice. In this way, they use the "alternative" language or *code* to align and misalign themselves with the speaker. This sophisticated manipulation of code and sensitivity to misalignment emerges as these speakers share similar language ideologies, knowing what all the information on the floor means, no matter what language is being used.

As can be expected, Spanish is not the neutral language in every interaction. In fact, English proved to be the language that had the floor most of the time. The following interaction, named *nicknames* exemplifies this. In the following interaction, Spanish is used to poke fun at two of the participants (LI and RS). The article *la* (the) is used to introduce nicknames intended to mock LI and RS. At the end of the interaction, when RS would like to end the exchange, RS uses a complete sentence in Spanish ¡*Me estoy riendo de ti, güey!* (I'm laughing at you, dude!) to dismiss the interaction and highlight her impatience with the topic (see figure 7.6).

CLIP NAME: *nicknames*

1. JU:	What's wrong with you Liz?
2. LI:	((giggling))
3. AS:	I know, huh? She, she has the giggles.
4. JE:	She's "giggles" ((inaudible)) Mrs. Giggles.
5. AS:	"**La** giggles" [((laughter)) <the giggles>
6. JE:	[**La** giggles <the giggles>
7. AEA:	[No, that's her! ((probably pointing))
8. JE:	OH, Rosita?
9. AEA:	Yeah.
10. AS:	No! She's **la** "**la** shorty" <the shorty>
11. RS:	Mmhh ((followed by a sarcastic soft laugh))
12. AEA:	((laughs and imitates RS))
13. AS:	((laughs)) Trying to be "**la** giggles" <the giggles>
14.	((others laugh))
15. RS:	No, I'm laughing at you! **¡Me estoy riendo de ti, güey!** <I'm laughing at you, *dude* (derogatory)>

Figure 7.6 Interaction: *nicknames*. Example of codeswitching as a strategy for conflict resolution.

The last interaction that will be studied in this way appears below in figure 7.7, named *Card game 1*. In this interaction, the language that has the floor is English. One of the participants AEA has just won the game. JU is not happy with this outcome. JE and PM (lines 4, 5, and 10) use Spanish to convince JU that he indeed has lost. JU apparently aligns with them but, instead, introduces gender issues to the floor (who is in control, men or women?). To resolve the issue, AEA aligns herself with JU by using Spanish and by asserting that women "are in control" (lines 15, 17 and 26), even if this strategy means losing this game. Again, this shows that, for bicultural and bilingual people, alignment can be impressively negotiated through language choice.

CLIP NAME: *Card game 1*

1. AEA:	twenty-one!	
2. AS:	[OOOHHHH!!!	
3. JE:	[Still right there...	
4. JE:	**Te gana porque, porque ella tiene el**	[**rey**. ((Tapping at the table))
5. PM:	<< she wins because she has the	[**Tiene el rey** king>> <<She has the king>>
6. RS:	Yeah ((agreeing))	
7. AEA:	Really!? There's those rules!? WO:::W	
8. A:	Yeah	
9. RS:	Yeah ((agreeing))	
10. JE:	**Ye, acor, ¿porque quién manda? ¿Ella, o él?** <Stuttering. Because who's the boss? Her or him?>	
11. JU:	**¡La**	[**vieja!** <the woman (the old-lady, derogatory)>
12. JE:		[no, no oh.
13. ALL:		[yeah::: ((long and sustained)) [ah ohh!!! ((unclear who says this))
14. JE:	((laughter)) **!Ahí esta!:::** <There it is!> I won! I won!	
15. AEA:	[**En realidad, sí es cierto:::** ((agreeing, laughing))	
16. JU:	[I won! ((hand claps are heard, perhaps a high-five between the two people))	
17. AEA:	**En realidad,** you're right, **la vieja manda** <In truth, you're right, the woman is the boss>	
18. JU:	¡**Ahí está!** <There it is!> I won.	
19. JE:	For cards.	[**Pero de** cards <But in cards>
20. JU:		[I have the queen!
21. JE:	¡**De cards, de cards!** <In cards, in cards!>	
22. JU:	**¿Quién manda?** <Who's the boss?>	
23. LI:	((soft laugh))	
24. ALL:	((inaudible))	
25. PM:	**Ya!** ((thump on the table)) <alright! >	
26. AEA:	[**En todo, ¿eh?** <In everything, eh?> ((laughing))	
27. JU:	[**Ahí está.** <There it is!> **Ahí está.** <There it is!> I won.	

Figure 7.7 Interaction: *Card game 1*. Example of codeswitching as a strategy for conflict resolution.

In this chapter, I have briefly looked at the data collected for this dissertation in a completely new light in order to underline the importance and relevance of linguistic research in **all** fields of study. I have shown that language choice is a code or resource that is part of the

linguistic repertoire of bilingual Chicanos/as. For these Chicanos/as, the use of the "other" code serves as a tool to highlight alignment and misalignment in social interactions. Like Goodwin (1990), I find that the participants of my investigation are "actors actively engaged in the construction of their social worlds rather than passive objects who are the recipients of a culture." (Goodwin, 1990, p. 284)

APPENDIX 2

PRE-CUESTIONARIO / PRE-QUESTIONNAIRE (USED TO SELECT PARTICIPANTS)

Question 1: Do you think that Spanish and English are equally important?

Question 2: Do you ever mix Spanish and English? Do you know what *Spanglish* is?

Question 3: What do you think the role of education is in your family and in your home community?

Question 4: Do you think of yourself as Mexican, Mexican-American, Chicano/a, Latino/a, or Hispanic? And, do you feel connected to the Mexican-American or Chicano/a community on campus?

Question 5: Have you formally studied Spanish?

CUESTIONARIO /QUESTIONNAIRE
(USED TO SELECT SOME NATURALISTIC DATA AND TO HELP THE PARTICIPANT BECOME COMFORTABLE)

1. ¿CÓMO TE LLAMAS?
(What is your name?)

2. ¿CUÁNTOS AÑOS TIENES?
(How old are you?)

3. ¿CUÁNDO ES TU CUMPLEAÑOS?
(When is your birthday?)

4. ¿DÓNDE NACISTE?
(Where were you born?)

5. ¿A QUÉ TE DEDICAS?
(What do you do?)

6. ¿EN TU CASA, QUE IDIOMA SE HABLA?
(What language is spoken at home?)

7. ¿SE TE HABLABA ESPAÑOL E INGLÉS, O ÚNICAMENTE ESPAÑOL, CUANDO ERAS NIÑO/A?
(Were you spoken to in Spanish and in English, or only in Spanish, when you were growing up?)

8. ¿HAS ESTUDIADO ESPAÑOL FORMALMENTE?
(Have you formally studied Spanish?)

9. ¿DE DÓNDE SON TUS PAPÁS?
(Where are your parents from?)

10. ¿QUÉ SABES DE DONDE SON TUS PAPÁS?
(What do you know about where your parents are from?)

11. ¿A QUÉ EDAD SE VINIERON TUS PAPÁS A ESTADOS UNIDOS?
(How old were your parents when they came to the United States?)

12. ¿POR QUÉ SE VINIERON TUS PAPÁS A ESTADOS UNIDOS?
(Why did your parents come to the United States?)

13. ¿HASTA QUÉ AÑO ESCOLAR ASISTIERON TUS PAPÁS?
(How much formal schooling did your parents have?)

14. ¿DE DÓNDE SON TUS ABUELOS?
(Where are your grandparents from?)

15. ¿VIVEN?
(Are they alive?)

16. ¿DÓNDE VIVEN Y QUÉ HACEN O HICIERON?
(Where do they live and what do they do?)

17. ¿A QUÉ SE DEDICAN TUS PAPÁS?
(What do your parents do?)

18. ¿TIENES HERMANOS O HERMANAS?
(Do you have brothers or sisters?)

19. ¿CÓMO SE LLAMAN?
(What are their names?)

20. ¿QUÉ EDADES TIENEN?
(How old are they?)

21. ¿A QUÉ SE DEDICAN?
(What do they do?)

22. ¿TIENES PASATIEMPOS? ¿CUÁLES SON?
(Do you have any hobbbies? What are they?)

23. ¿TE GUSTA HABLAR ESPAÑOL?
(Do you like to speak Spanish?)

24. ¿TE GUSTA ESCRIBIRLO?
(Do you like to write it?)

25. ¿QUÉ TAN IMPORTANTE ES EL HABLAR ESPAÑOL PARA TÍ?
(How important is Spanish to you?)

26. ¿PARA TU FAMILIA/ PAPÁS?
(And, for your family? Your parents?)

27. ¿QUÉ TE CUESTA MÁS TRABAJO DEL ESPAÑOL Y POR QUÉ?
(What is the hardest thing about Spanish and why?)

28. ¿EN QUÉ IDIOMA LES HABLAS A TUS PAPÁS?
(What language do you use to speak to your parents?)

29. ¿HERMANOS/AS?
(To your siblings?)

30. ¿AMIGOS/AS?
(To your friends?)

31. ¿ABUELOS Y OTROS FAMILIARES?
(To your granparents and other relatives?)

32. ¿CREES QUE HABLAS UN BUEN ESPAÑOL?
(Do you think you speak Spanish well?)

33. ¿QUÉ ES UN BUEN ESPAÑOL PARA TI?
(What is speaking Spanish *well* to you?)

34. ¿QUÉ OPINIONES TIENES DEL USO DE LA MEZCLA DEL ESPAÑOL E INGLÉS?
(How do you feel about mixing Spanish and English?)

35. ¿POR QUÉ CREES QUE LA GENTE MEZCLA?
(Why do you think people mix languages?)

36. ¿TÚ MEZCLAS?
(Do you mix languages?)

37. ¿POR QUÉ SÍ O POR QUÉ NO?
(Why or why not?)

38. ¿QUÉ PIENSAN TUS PAPÁS DE TU ESPAÑOL?
(What do your parents think about your Spanish?)

39. ¿Y, TUS AMIGOS?
(And, your friends?)

POST-CUESTIONARIO /POST-QUESTIONNAIRE
(USED TO SELECT SCRIPTED DATA DATA)

GENERAL INSTRUCTIONS:

AHORA, TE VOY A PEDIR QUE PRODUZCAS ALGUNAS ORACIONES EN ESPAÑOL.

TE VOY A DAR LA CIRCUSTANCIA (SCENARIO) Y TE VOY A DAR LA RESPUESTA QUE BUSCO EN ESCRITO PARA QUE TU LA PRODUZCAS DE LA MANERA MÁS NATURAL POSIBLE.

RECUERDA QUE NO ME INTERESA TU GRAMÁTICA, ME INTERESAN LOS SONIDOS QUE PRODUCES.

(Now, I will ask you to produce a few sentences in Spanish.

I will give you a scenario for each potential answer that I would like you to produce so that you can produce it as naturally as possible.

Remember that I am not interested in your "grammar", I am interested in the sounds you produce.**)**

I. INSTRUCTIONS: TRANSLATE THE FOLLOWING STATEMENTS INTO SPANISH. THE IDEAL ANSWER IS IN PARENTHESIS, HOWEVER, YOU CAN TRANSLATE ANY WAY YOU THINK IS BEST.

The girl speaks.	(La niña habla)
The girl does not speak.	(La niña no habla)
The girl does not speak any more.	(La niña ya no habla)
The girl did not speak any more.	(La niña ya no hablaba)
The girl will not speak any more.	(La niña ya no hablará)
The girl will come/arrive quickly/fast.	(La niña vendrá rápido)

NOW, READ EACH TRANSLATION TEN TIMES.

II. INSTRUCTIONS: READ THE FOLLOWING QUESTIONS IN SPANISH AND ANSWER THEM IN FULL SENTENCES. THE IDEAL ANSWER IS IN PARENTHESIS, HOWEVER, YOU CAN ANSWER ANY WAY YOU THINK IS BEST. IF POSSIBLE, TRY TO <u>EMPHASIZE</u> THE UNDERLINED WORD.

¿Quién ya no habla?	(La <u>niña</u> ya no habla)
¿Qué no hace ya la niña?	(La niña ya no <u>habla</u>)

¿La niña aún habla?	(No. La niña ya no habla)
¿La niña ya no baila?	(No. La niña ya no habla)

NOW, REPEAT EACH ANSWER TEN TIMES.

III. INSTRUCTIONS: TRANSLATE THE FOLLOWING QUESTIONS INTO SPANISH. THE IDEAL ANSWER IS IN PARENTHESIS, HOWEVER, YOU CAN TRANSLATE ANY WAY YOU THINK IS BEST.

The girl speaks?	(¿La niña habla?)
The girl does not speak?	(¿La niña no habla?)
The girl does not speak any more?	(¿La niña ya no habla?)
The girl did not speak any more?	(¿La niña ya no hablaba?)
The girl will not speak any more?	(¿La niña ya no hablará?)
Who doesn't speak any more?	(¿Quién ya no habla?)
When doesn't she speak any more?	(¿Cuándo ya no habla?)

NOW, REPEAT EACH TRANSLATION TEN TIMES.

IV. INSTRUCTIONS: WOULD YOU LIKE TO REPEAT ANY OF THE ACTIVITIES? FEEL FREE TO DO SO.

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