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Intonational Phonology of Miami Cuban Spanish: An AM Model

A thesis submitted in partial satisfaction of the requirements for the degree Master of Arts in  
Linguistics

by

Ann Aly Bailey

2014



## ABSTRACT OF THE THESIS

Intonational Phonology of Miami Cuban Spanish: An AM Model

by

Ann Aly Bailey

Master of Arts in Linguistics

University of California, Los Angeles 2014

Professor Sun-Ah Jun, Chair

The present study proposes a model of intonational phonology for Miami Cuban (MC) Spanish within the Autosegmental-Metrical (AM) framework of phonology. Controlled and semi-spontaneous speech of 9 speakers was analyzed in order to establish the tonal inventory of this dialect, which contains three boundary tones, one prenuclear pitch accent, and three nuclear pitch accents. Results revealed that MC Spanish's tonal inventory most closely resembles that of Puerto Rican Spanish (Armstrong 2010), sharing a default prenuclear pitch accent and nuclear contours for broad and narrow focus, vocatives, echo questions, and exclamatives. Additionally, several sentence types had two possible boundary tone types, as seen in Alvord (2010) for yes/no questions. However, the boundary tone variation seen in the present study is not predicted solely by generation (as previously reported by Alvord 2010), but suggests a shift from the previous social indexing of boundary tones toward intergenerational variation, in which speakers from several generations produce both boundary tone types.

The thesis of Ann Aly Bailey is approved.

Kie Zuraw

Bruce Hayes

Sun-Ah Jun, Committee Chair

University of California, Los Angeles

2014

## TABLE OF CONTENTS

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Methodology and Data Analysis</b> .....	<b>3</b>
2.1 Consultants .....	3
2.2 Experimental Tasks .....	4
2.3 Data Collection Procedure .....	9
2.4 Data Analysis .....	10
<b>3. Proposed Intonational Model for Miami Cuban Spanish</b> .....	<b>12</b>
3.1 Prosodic Structure of Spanish .....	12
3.2 Tonal Inventory of Miami Cuban Spanish .....	16
3.2.1 Boundary Tones.....	16
3.2.2 Prenuclear Pitch Accents .....	27
3.2.3 Timed and Delayed Peaks .....	29
3.2.4 Nuclear Pitch Accents .....	31
<b>4. Distribution of Tonal Inventory Across Discourse Categories</b> .....	<b>38</b>
4.1 Broad focus declaratives .....	38
4.2 Imperatives .....	39
4.2.1 Imperative Statements .....	39
4.2.2 Requests.....	40
4.3 Questions .....	41
4.3.1 Yes/No Questions.....	41
4.3.2 Wh-questions .....	42
4.3.3 Alternative questions .....	43
4.3.4 Echo Questions .....	44
4.3.5 Tag Questions .....	45
4.4 Vocatives .....	46
4.5 Exclamative Statements .....	47
4.6 Enumerations.....	47
4.7 Narrow Focus .....	48
<b>5. Discussion</b> .....	<b>50</b>
<b>6. Future Directions</b> .....	<b>54</b>

<b>7. Appendix</b> .....	<b>54</b>
A. Task 1 (Reading Task) .....	54
B. Task 2 (Discourse Completion Task).....	57
<b>8. References</b> .....	<b>66</b>

## LIST OF FIGURES

Figure 1. Example of wh-question with annotation of waveform, pitch track and tiers. All the following figures containing waveforms and spectrograms will use the same format, but without tier labels.....	12
Figure 2. Schematic representation of Miami Cuban Spanish prosodic structure.....	16
Figure 3. Schematic representation of L% (left) and waveform and pitch track of a broad focus declarative (right) with L% boundary tone indicated with a box .....	18
Figure 4. Waveform and pitch track of tag question with L- boundary tone indicated with a box. ....	19
Figure 5. Schematic representation of rising H% (left) and waveform and pitch track of wh-question (right) with H% boundary tone indicated with a box.....	20
Figure 6. Schematic representation of plateau H% (left) and waveform and pitch track of wh-question (right) with H% boundary tone indicated with a box.....	21
Figure 7. Schematic representation of LH% (left) and waveform and pitch track of wh-question (right) with LH% boundary tone indicated with a box .....	22
Figure 8. Waveform and spectrogram of enumeration with H- boundary tones, indicated by boxes .....	23
Figure 9. Two examples of H% with differing degrees of rising. ....	24
Figure 10. Schematic representation of M% (left) and waveform and pitch track of confirmation question (right) with M% boundary tone indicated with a box .....	25
Figure 11. Minimal pair between H% (a) and M% (b), followed by minimal pair between L% (c) and M% (d). Boundary tones indicated with boxes.....	26
Figure 12. Waveform and pitch track of vocative and imperative, with M- boundary tone present after the vocative. M- is indicated with a box.....	27
Figure 13. Schematic representation of L*+H (far left), followed by four realizations of L*+H: typical realization on Lorena, downstepped variant (L*+!H) on mide, monotonal realization (L*) due to stress clash between quién and mide, and upstepped variant (¡L*+H).....	29
Figure 14. Schematic representation of L+<H* (left) and waveform and pitch track of declarative statement with L+<H* prenuclear pitch accent, indicated with a box.....	30
Figure 15. Schematic representation of L+H* (left) and waveform and pitch track of exclamative statement portion (¡Ay) qué olor más rico sentí cuando entré (aquí del pan!), (Wow, what a great smell I felt when I walked in of the bread!). The three words with final stress are indicated with boxes. ....	31
Figure 16. Distance from F0 peak and end of associated syllable, indicated with red line for L+H* (left) and L+<H* (right). ....	32
Figure 17. Graph showing distribution of delayed and timed peaks. ....	33
Figure 18. Schematic representation of L* (left) and waveform and pitch track of a wh-question with an L* nuclear pitch accent, indicated with a box.....	35



Figure 19. Schematic representation of L+H* nuclear pitch accent (left) and waveform and pitch track (right) of a confirmation question with L+H* nuclear pitch accent, indicated with a box..	36
Figure 20. Schematic representations of H+L* (left) and waveform and pitch track of broad focus declarative statement (right) with a H+L* nuclear pitch accent (similar to the schematic on the top left) indicated by a box .....	37
Figure 21. Imperative statement with L+H* L% nuclear configuration.....	40
Figure 22. Request realized with expanded pitch range and upstep on the nuclear pitch accent, indicated with a box .....	41
Figure 23. Waveform and pitch track of information seeking question with a binary choice, with H% after first choice and L% after second choice.....	44
Figure 24. Wh echo question with L+H* L% nuclear configuration .....	45
Figure 25. Tag phrases with penultimate stress (left) and final stress (right). Tag phrases are indicated with boxes .....	46
Figure 26. Normal vocative (left) with L+H* M% contour and insistent vocative (right) with L+H* L% contour .....	47
Figure 27. Excerpts of narrow focus statements with unfocused example for reference (a); typical narrow focus pattern (b); and optional realizations of narrow focus with two pitch accents (c) and with stress shifted to the first syllable (d). .....	49

## LIST OF TABLES

Table 1. Consultant demographics .....	4
Table 2. Percentage of prenuclear pitch accents in all data and in Tasks 1 and 2 .....	33
Table 3. Common Spanish <i>wh</i> -words .....	42
Table 4. Common nuclear contours and percentages .....	49
Table 5. Categorical boundary tone preference by question type and speaker .....	51
Table 6. Nuclear pitch accent and boundary tones of categories across Caribbean dialects, Pan-Spanish ToBI .....	53

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## 1. Introduction

This study proposes a model of intonational phonology for Cuban Spanish as spoken in Miami, FL (henceforth Miami Cuban Spanish). Previous work by Beckman et al. (2002) proposes an intonational model for Spanish (represented by data from Mexican and Peninsular Spanish speakers and referred to as Pan\_Spanish), which was later revised to include additional categories by Estebas Vilaplana & Prieto (2008). However, as the data used to create the Pan\_Spanish model cannot account for all the intonational variation present in the numerous dialects of Spanish in diverse geographical regions, the description of ten additional dialects of Spanish were documented in Roseano & Prieto (2010). Although the dialects included in Roseano & Prieto (2010) represent various Spanish-speaking regions apart from Spain and Mexico, (such as dialects from the Southern Cone, Andean, and Caribbean Islands), several dialects and regions still remain underrepresented. Amongst these in the intonation literature are Central American dialects (such as Salvadoran and Guatemalan), Cuban Spanish, and descriptions of United States vernaculars of Spanish (such as New York, Florida, or Los Angeles Vernacular Spanish).

Linguistic studies of Cuban Spanish (in the US community of linguists) are hampered by the lack of diplomatic ties between the US and Cuba, which restrict travel from the US to Cuba. In lieu of soliciting the permits necessary to travel to Cuba for research, many linguists consult the Cuban community in south Florida, which comprises the largest population of persons of Cuban descent outside of Cuba. Of the 1.8 million persons of Cuban descent reported on the 2010 US Census, 1.2 million reside in Florida. The large community of Cubans and Cuban-Americans present (and growing) in Florida since the middle of the twentieth century has resulted in a stable

environment for a south Florida Cuban Spanish vernacular, which has received attention from sociolinguists (Lynch 2009, Alvord 2010, among others) investigating phenomena such as bilingual identity, aspiration and deletion of coda /s/, and boundary tone variation in yes/no questions. Although the present study does not continue the sociolinguistic tradition in studying Cuban Spanish in Miami, the insights provided by these works about the social indexing of various phonetic features of this dialect are valuable when interpreting the intonational variation seen within this population.

The present study will follow previous work on Spanish intonational phonology and assume the Autosegmental-Metrical (AM) framework (Pierrehumbert 1980, Beckman & Pierrehumbert 1986, Ladd 1996) and transcription conventions of the Tones and Break Indices (ToBI) (Beckman & Hirschberg 1994, Beckman & Ayers 1994). Section 2 will discuss the methodology used to collect data and demographic information of the speakers consulted for the present study; Section 3 will discuss the prosodic structure of Miami Cuban Spanish and previous assumptions made about Spanish intonational phonology in the AM model and present the tonal inventory of Miami Cuban Spanish; in Section 4, the distribution of the tonal inventory across various sentence types, such as declaratives, questions, and exclamative statements will be exemplified; Section 5 will compare the findings of the Miami Cuban Spanish intonational phonology and ToBI with those of Pan\_Spanish and other Caribbean Island dialects as well as discuss within-group differences seen in the Miami Cuban Spanish speakers consulted, concluding in Section 6 with avenues of future investigation on this topic.

## 2. Methodology and Data Analysis

This section will explain the experimental method used in the current study, including demographic information about native speakers consulted, the tasks recorded and procedure of recordings, and the equipment and sources used in data analysis.

### 2.1 Consultants

The current study is based on the speech of nine native Cuban Spanish speakers living in Miami-Dade or Lee County area in south Florida. These nine consultants consist of two subgroups: those born in Cuba (henceforth referred to as Cuban-born speakers), who then moved to the United States and acquired English as adults ( $n = 5$ ) and those who were born in Miami (henceforth referred to as Miami-Born) and acquired both Spanish and English as children ( $n = 4$ ). All Miami-Born speakers are second-generation Cuban-Americans, with parents born in Cuba and immigrating to the US. before their birth. The Miami born speakers were between 24-36 years old at the time of data collection (average of 30 years). The Cuban-born speakers were between 39-68 years old (average of 52 years) and were between 19-32 years old (average of 25 years) when they arrived in the US. Apart from acquiring Spanish at home, all participants reported at least one year of formal instruction in Spanish in school as well.

The consultants reported their language use (Spanish, English, or both languages) at home, work, and with friends, revealing several differences between groups. At home, all Cuban-born speakers and half of the Miami-Born speakers (1F, 1M) reported using Spanish at home, whereas the remaining Miami-Born speakers (2F, 3F) reported using English at home. At work, four Cuban-born speakers (2M, 3M, 4M, 5F) and two Miami-Born speakers (1M, 2F) reported using English and the remaining Cuban-born speaker (5F) and two Miami-Born speakers (1F, 3F)

reported using both languages at work. Finally, with friends, all Miami-Born speakers reported using English; four Cuban-born speakers (4F, 5F, 3M, 4M) reported speaking Spanish; and the remaining Cuban-born speaker (2M) reported using both languages. Table 1 displays the demographic information reported by all consultants. The *speaker* column reports a numerical code and the sex of the speaker for abbreviated reference and anonymity of speakers.

Group	Speaker	Age	Year of arrival to US (Parents, if born in US)	Spanish in school	Occupation	Home	Work	Friends
Miami-Born	1M	24	1980	1 year	Student	Spanish	English	English
	1F	29	1981	1 year	Student	Spanish	Both	English
	2F	31	1969/1970	2 years	Planning technician	English	English	English
	3F	36	1967	1 year	Office manager	English	Both	English
Cuban-born	2M	39	1992	N/A	Professor	Spanish	English	Both
	4F	41	1999	N/A	Teacher	Spanish	English	Spanish
	3M	50	1988	N/A	Mailing manager	Spanish	English	Spanish
	4M	63	1988	N/A	Machine operator	Spanish	English	Spanish
	5F	68	1970	N/A	Retired	Spanish	Both	Spanish

Table 1. Consultant demographics

## 2.2 Experimental Tasks

Two tasks were administered in the present study. Task 1 was a reading task designed to elicit careful, formal speech from consultants and consisted of Spanish sentences written on a piece of paper. In order to generate as continuous a pitch track as possible, words containing sonorous segments in which pitch is sustained (such as vowels, nasals, liquids, voiced approximants) were chosen. This task was divided into four parts: (1) declaratives with differing

word order; (2) declaratives with increasing numbers interstress syllables; (3) questions; and (4) corrective focus.

Part 1 consisted of nine declarative utterances containing a lexical subject, verb, and direct object. Each utterance had three content words, which were all trisyllabic. In order to test whether location of stress in a word resulted in different intonation patterns, the stressed syllable of two of the words (verb and object) contained penultimate stress while the stressed syllable of the subject varied between antepenultimate, penultimate, and final stress. Examples of target sentences in which the subject differed in location of stress are shown in (1). Syllables in each word are separated by periods and the stressed syllables are bolded.

- (1) a. **Mé**.di.cos ve.**í**.an o.**ve**.jas  
Doctor-pl see-imp-3pl sheep-pl  
*Doctors saw sheep*
- b. Lo.**re**.na mi.**ra**.ba i.**gua**.nas  
Lorena see-imp-3sg iguana-pl  
*Lorena looked (at) iguanas.*
- c. Ber.na.**bé** ve.**í**.a li.**mo**.nes  
Bernabé see-imp-3sg lemon/lime-pl  
*Bernabe saw lemons/limes.*

In order to test word order effects on intonation, the utterances were presented in three different (grammatical) orders: subject-verb-object; verb-subject-object; and verb-object-subject. Different combinations of lexical items used in previous target utterances as well as new lexical items with sonorous segments and the appropriate stress locations were included for variety. Examples of the word order variation based on (1a) are shown in (2).

- (2) a. Médicos veían ovejas (subject-verb-object)  
b. Veían médicos ovejas (verb-subject-object)  
c. Veían ovejas médicos (verb-object-subject)



Part 2 of Task 1 also consisted of nine target utterances, which were designed to elicit stress clash (two adjacent stressed syllables) and stress lapse (increasing the number of unstressed syllables between stressed syllables). Environments containing stress clash and lapse can result in the deletion or addition of prosodic elements, which may be realized differently cross-linguistically. Utterances in Part 2 consisted of three content words (the addition of the masculine definite article *el* was necessary for some utterances), all in verb-object-adjective order (Spanish is a pro-drop language). An example of stress clash (a) and stress lapse (b, four syllables in between stressed syllables) is shown in (3).

- (3) a. A.yu.**dó** (el) á.gui.la bo.**ni**.ta (stress clash between **dó** and **á**)  
 Helped-past-3sg the-masc-sing eagle beautiful  
*He/she helped the beautiful eagle.*
- b. Mi.**r**á.ba.mos ma.ra.**bús** bo.**ni**.tos (stress lapse between **r**á and **bús**)  
 Looked-imp-1pl marabou-pl beautiful-pl  
*We looked (at) beautiful marabouts*

Part 3 of Task 1 elicited questions and imperatives from consultants based on the content of a declarative sentence. Part 3 contained sixteen total utterances, consisting of two sets of declaratives (for reference), requests, polite requests (marked by conditional tense), imperatives, yes/no questions, wh-questions, positive tag questions, and negative tag questions. With the exception of tag questions and imperatives, the utterances in Part 3 contained three content words (indefinite articles were sometimes necessary), but number of syllables and word order varied depending on sentence type. An example of an imperative, request, and negative tag question and their differences are shown below in (4).

- (4) a. ¡Bebe limonada! (Imperative)  
 Drink-imperative-2sg lemonade  
*Drink lemonade!*
- b. ¿Me das una limonada? (Request)  
 1-sg-IO give-pres-2sg a-fem-sing lemonade  
*(Can) you give me a lemonade?*
- c. Marina bebe limonada, ¿no? (Tag question)  
 Marina drink-pres-3sg lemonade no  
*Marina drinks lemonade, no?*

Part 4 of Task 1 consisted of nine utterances and was designed to elicit corrective focus.

Words with corrective focus may attract more exaggerated prosodic events or cause a flattening in pitch (F0) after the focused item, but is realized differently cross-linguistically. Corrective focus was elicited by providing consultants with a context of “true information” within a pseudo-dialect in which they answered questions which contradicted the information given in the context. The contradictory question was provided in parentheses, followed by a declarative statement which corrected the incorrect information and included a focused word. Focused words were written in all caps and consultants were told to give emphasis to any words in all caps. Similar to Parts 1-3 of Task 1, the position of focus varied throughout Part 4 in order to elicit focus in all sentence positions. An example of how corrective focus was elicited in a pseudo-dialogue is shown in (5).

- (5) a. Marina bebió limonada. (context with “true information”)  
 Marina drink-past-3sg lemonade  
*Marina drank lemonade.*
- b. (¿Marina bebió café?) (No,) Marina bebió LIMONADA.  
 Marina drink-past-3sg coffee?  
*(Did Marina drink coffee?) (No,) Marina drank LEMONANDE.*
- c. (¿Marina prepara limonada?) (No,) Marina BEBE limonada.  
 Marina prepare-pres-3sg lemonade No, Marina drink-pres-3sg lemonade  
*(Did Marina prepare lemonade?) (No,) Marina DRINKS lemonade.*

Thirteen distractor sentences of similar length and content were included in Task 1 to avoid repetition effects with the target sentences. The content for Task 1 was designed by the author, a near-native speaker of Cuban Spanish and then verified for grammaticality and dialectal appropriateness by a native Cuban Spanish speaker who did not participate in the study. All materials used for Task 1 are included in the Appendix.

Task 2 was a Discourse Completion Task (DCT) modified from Roseano & Prieto (2010). This task was modified to include lexical items, expressions, and locations appropriate to Cuban Spanish and south Florida by the author and was verified by a native Cuban Spanish speaker who did not participate in the study. The DCT consists of seventy contexts which prompt the consultant to answer freely while eliciting a specific discourse category, such as an exclamative statement, echo question, vocative, or imperative. This task allows for more informal, naturalistic speech than Task 1 while also allowing for cross-dialectal comparison with the models proposed in Roseano & Prieto (2010), where the same DCT was administered with minor dialectal modifications. Similar to Task 1, the contexts in Task 2 attempt to elicit words with sonorous consonants, but due to the open-ended nature of the task, the segments produced by consultants

were not as easily controlled or predictable. Examples of three contexts provided orally from the author to consultants are shown in (6): a request, an imperative, and a vocative. Task 2 in its entirety is included in the Appendix.

(6) a. Request: Estás en la calle y quieres preguntar la hora.  
Be-pres-2sg in the-fem street and want-pres-2sg ask-inf the-fem hour.  
*You are on the street and you want to ask (someone) for the time.*

b. Imperative: Trabajas en el lobby de un hotel y entra  
Work-pres-2sg in the-masc lobby of a-masc hotel and enter-pres-3sg  
  
una pareja que quiere una habitación. Diles  
a-fem couple that want-pres-3sg a-fem room. Tell them-2sg-  
imperative

que llenen un formulario.  
that fill-pres-3pl-subj a-masc form.  
*You work in the lobby of a hotel and a couple comes in and wants a room.  
Tell them to fill out a form.*

c. Vocative: Entrás en la casa de una amiga tuya, Marina,  
Enter-pres-2sg in the-fem house of a-fem friend yours-fem Marina  
  
pero al entrar no la ves. Llámala.  
But at enter-inf no her-dative see-pres-2sg. Call her-2sg-imperative  
*You enter your friend Marina's house, but as you enter, you don't see her.  
Call out to her.*

### 2.3 Data Collection Procedure

All data was collected in Miami and Fort Myers, Florida. Consultants were recorded using an Olympus LS-11 portable voice recorder in .wav format at a 44.1 kHz sampling rate and a 16-bit rate. Recording were done in small, quiet locations for privacy and acoustic quality, such as a small room in a home or a study room in a public library. After obtaining informed consent in the language of choice of the consultant (consent materials were available in Spanish or English), consultants completed a questionnaire about their demographic information and language use to

confirm their eligibility in the study (Spanish speaker of Cuban descent who currently lives or has lived in Miami, Florida). Before recording, consultants were informed that they would be completing tasks which involved reading sentences from a piece of paper and answering questions to hypothetical contexts.

For Task 1, consultants were instructed to read over the sentences first and were encouraged to ask any questions about the task before beginning to speak. For Task 2, consultants were instructed to answer each prompt as naturally as possible and that unless prompted to include any names or content in their answers, they were free to answer the contexts however they preferred. In the event that consultants did not answer with the targeted sentence type, the researcher repeated or reworded the context up to two additional times before moving onto the next item. The average time elapsed per consultant for the consent process, questionnaire, and tasks was approximately thirty minutes. Consultants were paid \$15 cash after participating.

## 2.4 Data Analysis

The data collected were analyzed acoustically using *Praat*, version 5.3.16 (Boersma & Weenink 2014). Portions of the data that included too much background noise, interference by the interviewer, non-linguistic noise by the participant (such as laughter, sneezing, or rustling of papers), or creaky voice that disrupted the pitch track were excluded. The Task 1 data for three male speakers (1M, 3M, 4M) was excluded due to literacy issues in Spanish and halted, monotone reading styles that did not reflect the expected style of the target utterances (e.g. flat questions with no tonal excursions). Data from all nine consultants were analyzed and included in Task 2, although females tended to give longer responses or various responses to contexts when compared with males (females gave a total of 349 responses to Task 2, whereas males gave

201). Task 1 yielded a total of 201 analyzable utterances and Task 2 yielded a total of 550 analyzable utterances.

The categories and labeling conventions established in the Puerto Rican ToBI (Armstrong (2010)), Dominican ToBI (Willis (2010)), and Pan Spanish ToBI (Estebas Plana & Prieto (2009)) were consulted when analyzing and creating the ToBI for Miami Cuban Spanish. Following the precedent set forth by the previous Spanish ToBI systems mentioned, relevant prosodic information in the data is labeled in 5 different tiers below the spectrogram in *Praat*, as shown in Figure 1. Tier 1 is the *word tier*, which contains the orthography of the words in the utterances, in Spanish. In the event that one or more segments is not realized (such as the deletion of coda-position /s/, which is common in Caribbean varieties of Spanish), the unrealized segment is put into parentheses. Tier 2 is the *syllable tier*, which marks the stressed syllable (also orthographically) of content words, where pitch events are expected to occur in Spanish. Tier 3 is the *tone tier*, which marks the pitch accents and boundary tones in the utterance. Pitch accent and boundary tone notation and definitions will be discussed further in Section 3. Tier 4 is the *breaks tier*, which measures the degree of juncture between words, ranging from 0 (no perceptual juncture) to 4 (end of intonational phrase). Tier 5 is the *gloss tier*, which shows the English gloss for the utterance in question. When necessary, a sixth tier was included (the *miscellaneous tier*), which lists non-linguistic information about the utterance, such as laughter, coughing, or other noises within angled brackets (e.g. <laughter>). When no miscellaneous information is present in the recording, such as in Figure 1, this tier was not included.

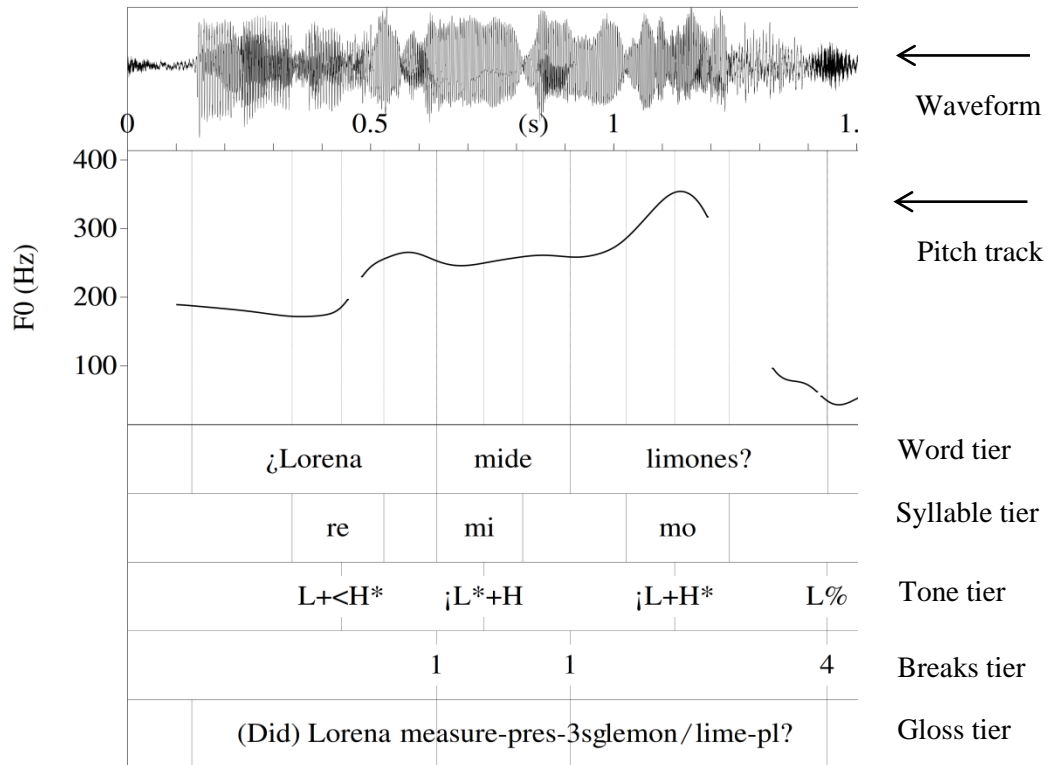


Figure 1. Example of *wh*-question with annotation of waveform, pitch track and tiers. All the following figures containing waveforms and spectrograms will use the same format, but without tier labels.

### 3. Proposed Intonational Model for Miami Cuban Spanish

The following section will explain the proposed intonational model of Miami Cuban Spanish, starting with its prosodic structure and continuing to the inventory of its distinctive tonal categories and the frequency with which they occur in the data analyzed. Section 4 will discuss how the proposed tonal categories combine to convey meaning across different discourse categories.

#### 3.1 Prosodic Structure of Spanish

All varieties of Spanish have contrastive lexical stress, with stress typically occurring on the penultimate syllable of words. Stress may also occur on the ultimate and antepenultimate

syllables, although these cases are not as common as penultimate stress and are typically marked orthographically with diacritics over the nucleus of the stressed syllable. No words are found in Spanish with stress more than three syllables from the end of the word (Hualde 2005:222). A minimal triplet which contrasts in stress is shown in (7), in which the stressed syllable of each word is bolded.

- (7) *numero*, ‘number/enumerate-pres-1sg’  
***número***, ‘number’  
*numeró*, ‘number/enumerate-past-3sg’

In contrast to languages like English, which undergo vowel quality and duration differences between stressed and unstressed syllables, Spanish has no such difference, making the differences between stressed and unstressed syllables less prominent than in languages that undergo vowel reduction. Studies such as Llisteri et al. (2003) provide evidence that neither duration nor intensity are reliable correlates of stress in Spanish when native speakers were tested, claiming that the pitch (F0) event on the stressed syllable, which may occur with a combination of longer duration and increased intensity, is a more reliable cue. Therefore, the stressed syllable in Spanish attracts pitch events (pitch accents) in addition to being marked by less salient suprasegmental cues, such as intensity and duration, instead of segmental cues, such as stop aspiration (as in English) or vowel raising (as in Brazilian Portuguese).

Above the word level in Spanish, which contains the stressed syllable, two additional prosodic levels have been proposed for Spanish: the *intermediate phrase* and *intonation phrase*. Previous accounts of Spanish intonation have agreed that there is evidence for an *intonation phrase* (IP), which contains one or more pitch accents and has a boundary tone on its right edge after the final pitch accent (in Spanish, this is the *nuclear pitch accent*) in the IP. The IP in



Spanish is marked by lengthening of its final syllable and an optional pause after. The IP typically coincides with a syntactic constituent as well, such as a clause. However, there is not as clear a consensus in the previous research on Spanish intonation about the status of the *intermediate phrase* (ip). Earlier works on Spanish intonation, such as Sosa (1999) claims that only one prosodic level above the word (i.e., IP) is necessary, with bitonal IP boundary tones accounting for any pitch events that occur between the nuclear pitch accent and the end of the IP.

Nibert (2000) and Hualde (2002), on the other hand, argue for the existence of both an ip and IP, providing evidence from ambiguous statements such as *vimos campos y pueblos abandonados* (*we saw abandoned fields and towns*), in which the ambiguity between what was abandoned can be distinguished prosodically, with an F<sub>0</sub> rise and lengthened syllable attributed to an ip. Additionally, Hualde (2002) also attributed intermediate phrases to the domain of upstep, claiming that a high ip boundary tone triggers upstep if IP medial. Subsequent studies on Spanish intonation, including the original and revised Pan Sp\_ToBI (Beckman et al 2002; Estebas Vilaplana & Prieto 2009, respectively) acknowledge the evidence proposed for the ip in Spanish, but remain agnostic on how to incorporate it, citing the need for more evidence that the ip differs from the IP (Beckman et al 2002) and stating that the bitonal boundary tones (as opposed to a stacked ip boundary tone and monotonal IP boundary tone, like in English) are sufficient (Estebas Vilaplana & Prieto 2009).

In the volume featuring ten dialects of Spanish by Roseano & Prieto (2010), the ip debate is mentioned in the editors' introduction, stating that perceptual evidence from Frota et al (2007) provides support that native speakers perceive a difference in juncture between the proposed ip and IP boundaries. These authors clarify that although this volume assumes both prosodic levels

(ip and IP), the ip boundary tone (marked with a ‘-‘) is only used IP medially, continuing with the conventions of the revised Pan Sp\_ToBI with respect to multi-tonal IP boundary tones instead of a combination of ip boundary tone and IP boundary tones marking the right edge of the IP.

Figure 2 provides a tree representation of the prosodic structure that will be assumed in the present study. Following the empirical support of the Miami Cuban Spanish data analyzed, the highest prosodic level is proposed to be an IP, which contains one or more ips. Below the IP is the ip, which must contain at least one pitch accent. The ip is characterized by a pitch excursion after its nuclear pitch accent, lengthening of the ip-final syllable (typically a shorter duration than IP-final lengthening), and optionally, a resetting of the pitch after the boundary. Figure 2 does not show an ip boundary tone when the ip is IP-final, as the present study will employ bitonal IP boundary tones when necessary. IPs that do not require bitonal targets (such as rising or falling) after the nuclear pitch accent will be labeled monotonally (as L% for falling contour, for example).

Below the ip, the words denoted by *w* represent content words, which have a pitch accent on the stressed syllable. Function words (e.g. clitics, articles, prepositions), which are not included in Figure 2 do not carry pitch accents, but are usually associated with a content word. The structure in Figure 2 is the same as the prosodic hierarchy found in most varieties of Spanish, as reported in studies such as Estebas Vilaplana & Prieto (2009) and volumes such as Roseano & Prieto (2010).

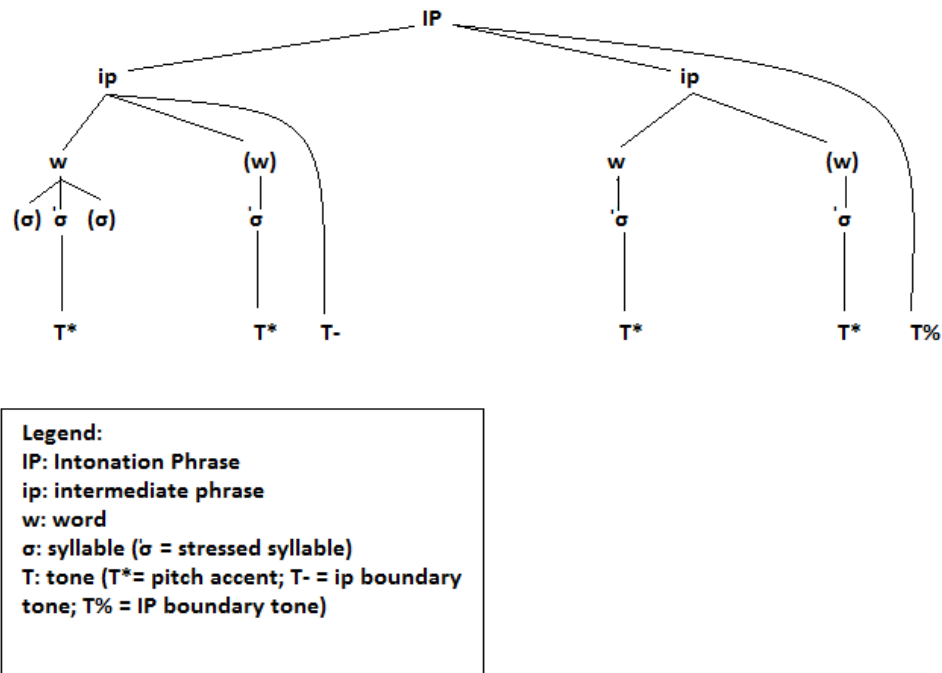


Figure 2. Schematic representation of Miami Cuban Spanish prosodic structure

### 3.2 Tonal Inventory of Miami Cuban Spanish

The data analyzed revealed that three categories of boundary tones (low, mid, and high) were distinctive at the IP and ip levels, and that one pre-nuclear pitch accent and three nuclear pitch accents were distinctive. There were three variants (*allotones*) of pre-nuclear pitch accents, all bitonal and rising, which differed in their peak alignment. L\*+H, the default nuclear pitch accent, has a low F0 (trough) in the stressed syllable; L+H\*, an allotone of L\*+H, has an F0 peak in the stressed syllable (timed speak); and L+<H\*, another allotone of L\*+H, has an F0 rise through the stressed syllable and an F0 peak on the following syllable (delayed peak). In nuclear position (last pitch accent of an IP), the following pitch accents types were observed: L+H\* (timed peak), L\* (trough in stressed syllable), and H+L\* (falling F0 during stressed syllable from a high tonal

target in the preceding syllable). All pitch accents may be followed by any boundary tone in this inventory except for two cases: (H+)L\* and M%, which is interpreted by native speakers equivalently to (H+)L\* H%; and L\*+H H%, which is phonetically indistinguishable from L\* H% in most cases. Apart from the exceptions mentioned, all other combinations are legal in Miami Cuban Spanish and contribute to linguistic meaning.

The following section will exemplify the tonal inventory of Miami Cuban Spanish by providing a schematic representation as well as phonetic and functional descriptions of each tonal category with examples from the data analyzed. IP and ip boundary tones will be discussed first, followed by pitch accents. Section 4 will discuss in more detail the distribution of the tonal categories proposed across various sentence types.

### 3.2.1 Boundary Tones

Three monotonal boundary tones are attested in the Miami Cuban Spanish data: low (L%, L-), high (H%, H-), and mid (M%, M-). L% and L- boundary tones are realized with a fall in the pitch (F0) after the nuclear pitch accent. L% boundary tones are used in neutral declaratives, imperatives, exclamative statements, (insistent) vocatives and one variant in yes/no questions and as the second boundary tone in alternative questions (i.e. the boundary tone for IP italicized in an utterance such as “Which do you prefer, *cake or ice cream?*”). Figure 3 below shows both schematic representations of the L% (the shaded area represents the IP-final syllable or the post-NPA (nuclear pitch accent) region if the final syllable carries the NPA) as well as waveform and pitch track of a neutral declarative ending in L%. The schematic representations for IP boundary tones in this section are also relevant for ip boundary tones.

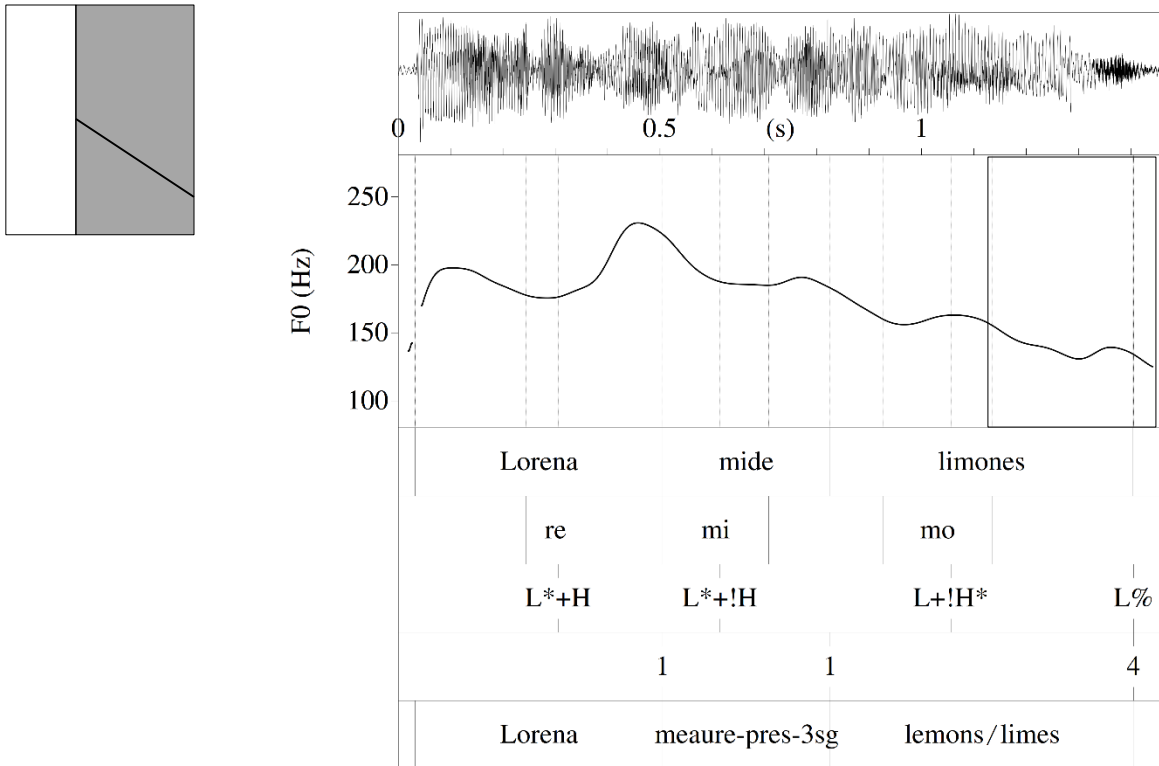


Figure 3. Schematic representation of L% (left) and waveform and pitch track of a broad focus declarative (right) with L% boundary tone indicated with a box.

Low ip boundaries (L-) are typically found connecting parts of larger utterances, serving as a boundary between declarative and tag phrase or between noun phrases and relative clauses. Intermediate phrase boundary tones in Spanish are not as substantially lengthened as IP boundary tones and do not have a pause after; however, there is typically a pitch reset after ip boundaries (as seen in the enumeration example in Figure 8). Figure 4 shows a tag question with a L- boundary tone between the declarative statement and the tag phrase.

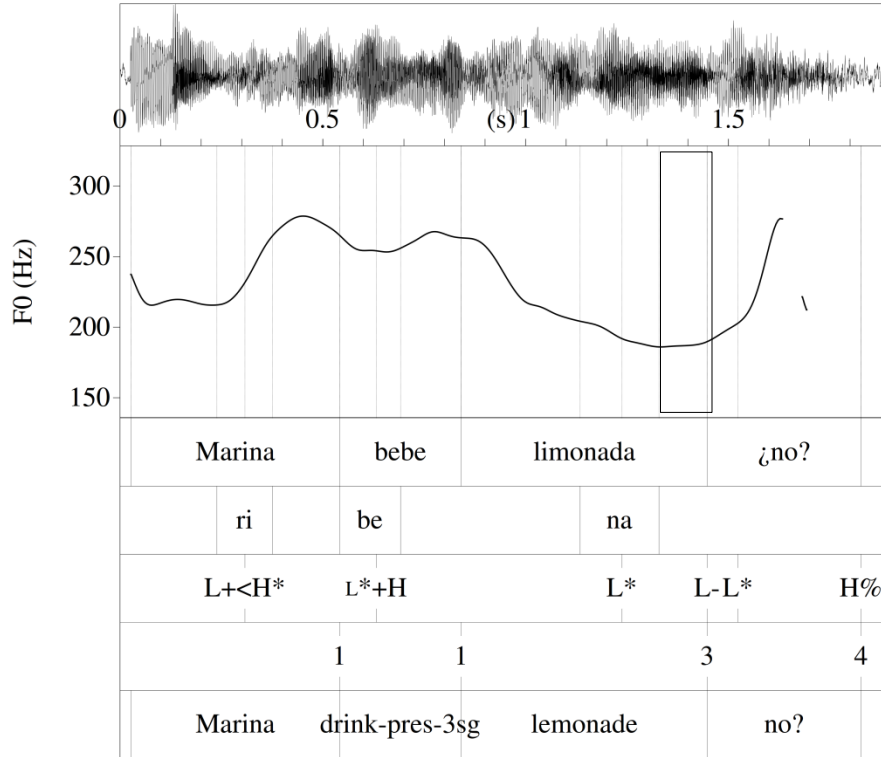


Figure 4. Waveform and pitch track of tag question with L- boundary tone indicated with a box.

H% boundary tones are realized either with a rising F0 from a low or high nuclear pitch accent or as a continued plateau from a high nuclear pitch accent. H% boundary tones are used as one possible realization for requests and most question types, such as yes/no questions, and *wh*-questions. In emphatic speech, a bitonal realization is also possible, in which the F0 falls from a high nuclear pitch accent and rises again (LH%). Figures 5, 6, and 7 show these three possibilities.

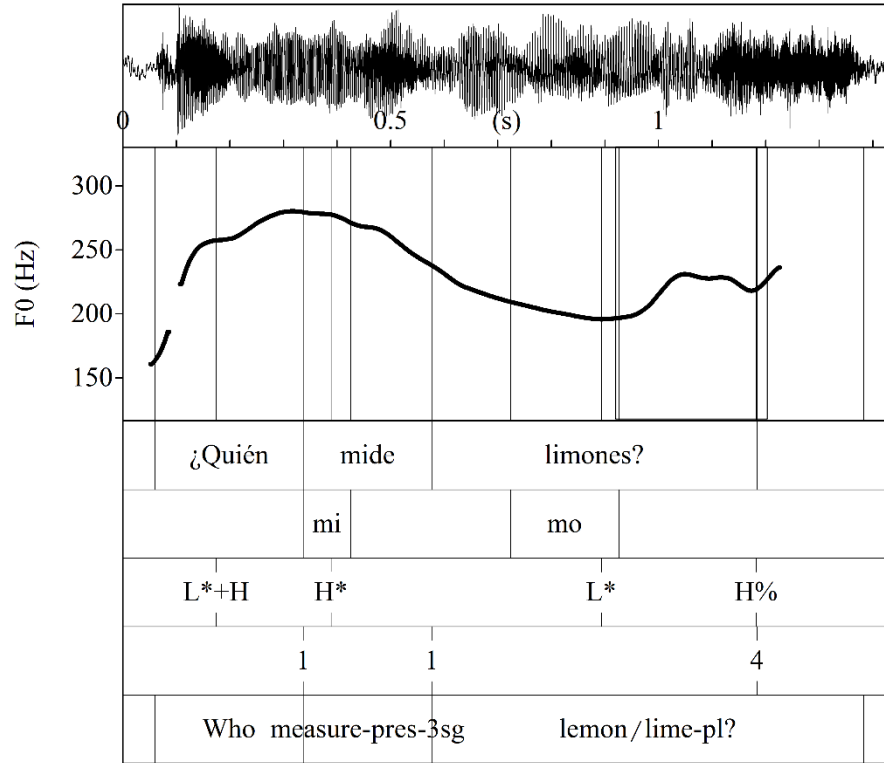
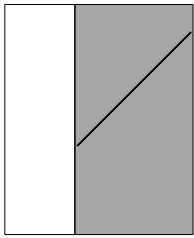


Figure 5. Schematic representation of rising H% (left) and waveform and pitch track of wh-question (right) with H% boundary tone indicated with a box.

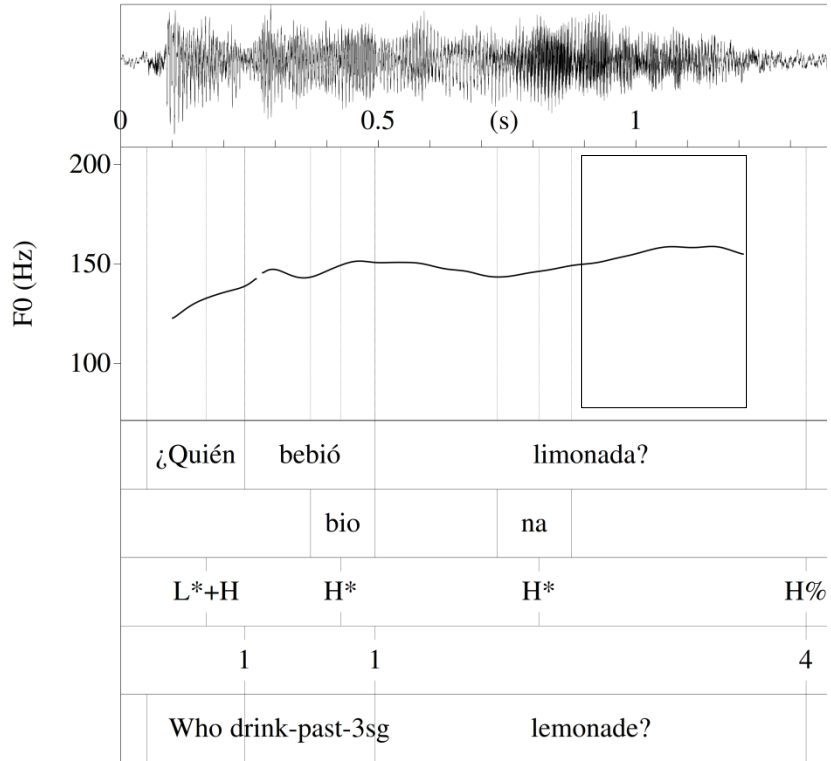
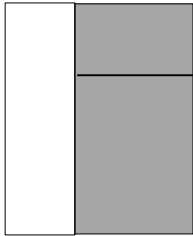


Figure 6. Schematic representation of plateau H% (left) and waveform and pitch track of wh-question (right) with H% boundary tone indicated with a box.



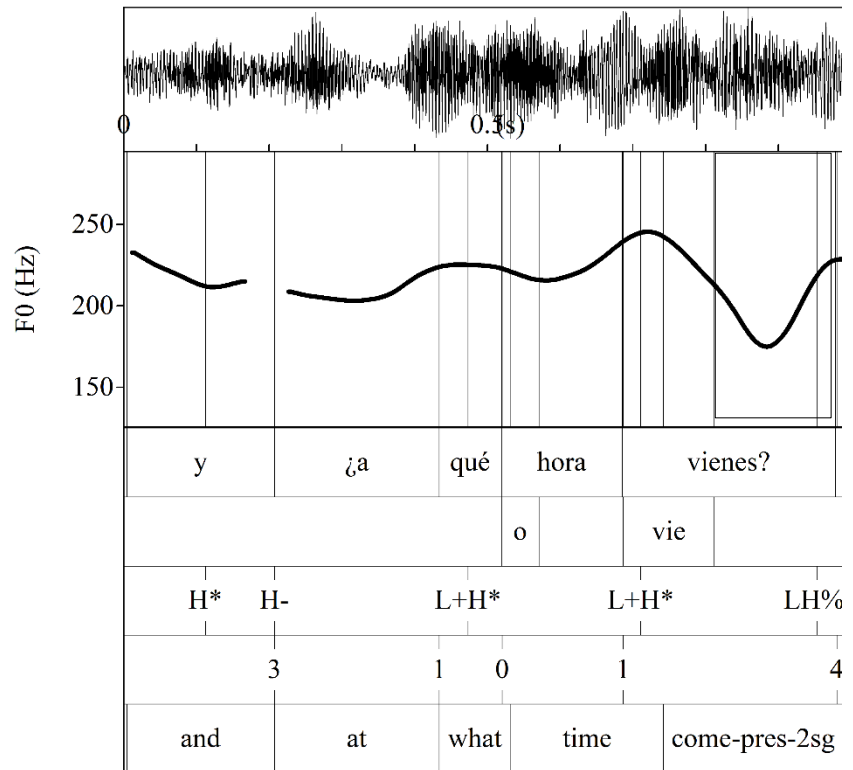
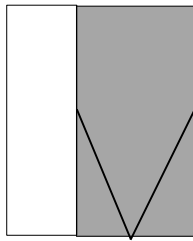


Figure 7. Schematic representation of LH% (left) and waveform and pitch track of *wh*-question (right) with LH% boundary tone indicated with a box.

High ip boundary tones (H-) are typically used to signal continuation by the speaker or to hold the floor in longer utterances and lists, and similar to H%, may be realized with a rising F0 after the nuclear pitch accent or as a plateau from a high nuclear pitch accent. Figure 8 shows an excerpt of enumeration in the form of a question, with a rising H- boundary tone after each number.

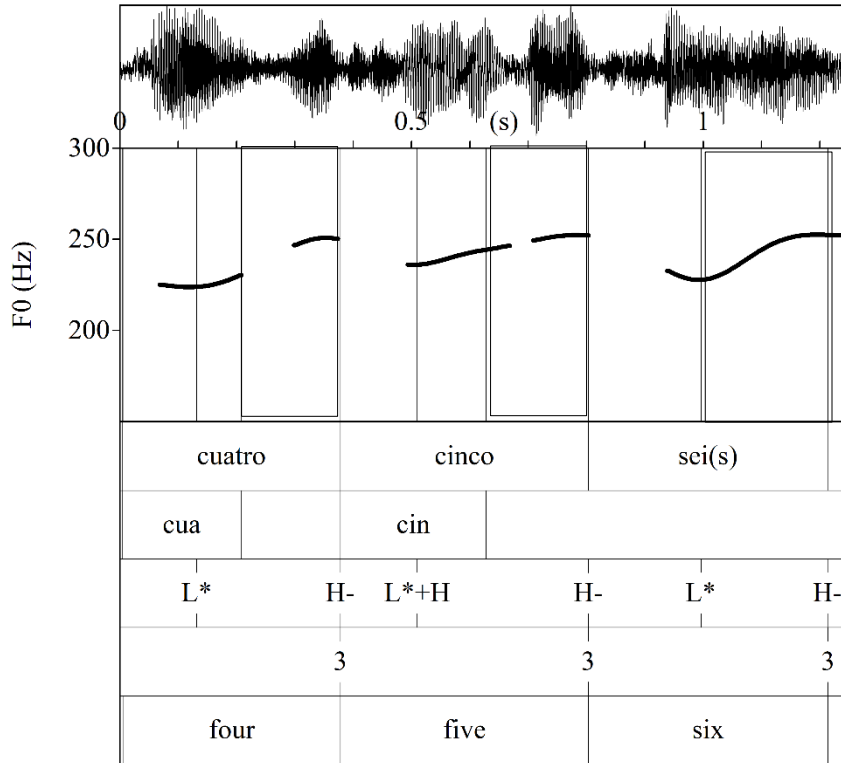


Figure 8. Waveform and spectrogram of enumeration with H- boundary tones, indicated by boxes.

M% boundary tones are less frequent than L% and H% and are realized with a slight fall from a high nuclear pitch accent. Slight rises in F0 from a low nuclear pitch accent (i.e. not as sharp a rise in F0 as a typical H%) were interpreted equivalently to questions with typical H% boundary tones (larger degree of rising), suggesting that any degree of final rising is interpreted as H%, as opposed to slight falls, which speakers identified as different than L% (large degree of F0 fall). Figure 9 juxtaposes the nuclear pitch accent and boundary tone of two *wh*-questions that contain L\* H% nuclear contours, but with different degrees of F0 rise after the nuclear pitch accent. When speakers were presented with examples such as those in Figure 9, they were interpreted equivalently (as true *wh*-questions).

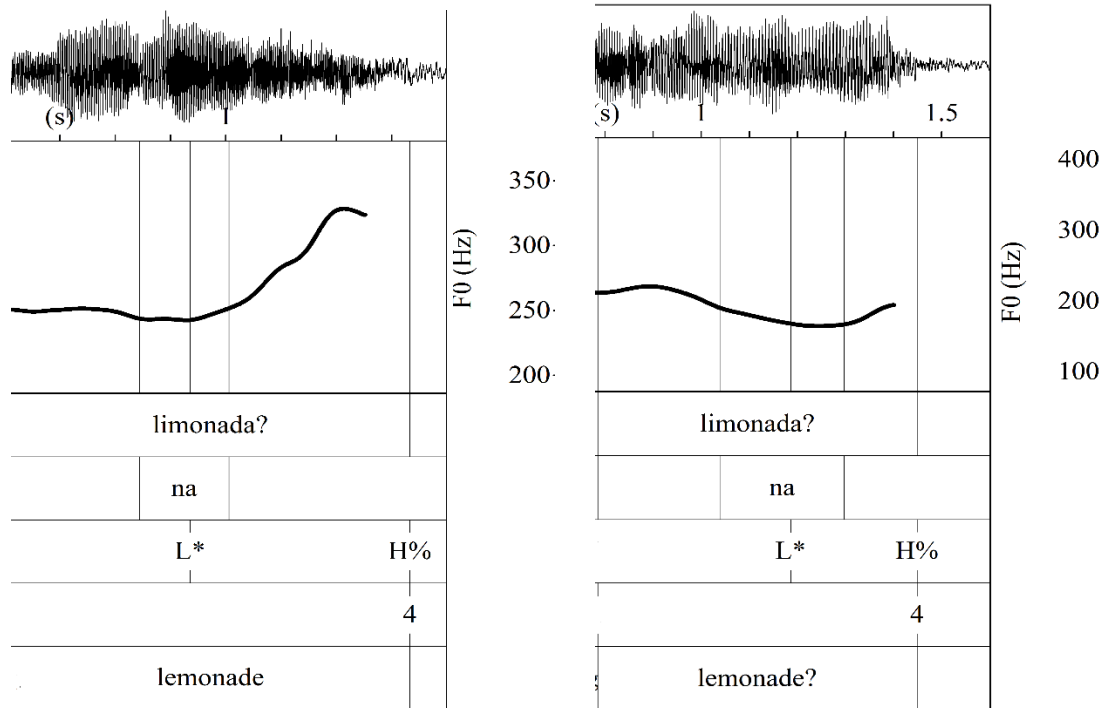


Figure 9. Two examples of H% with differing degrees of rising.

Examples such as Figure 9 provide evidence that in Miami Cuban Spanish, M% is only contrastive when realized with a falling F0 but not a rising F0, as attested in Puerto Rican Spanish (Armstrong 2010). M% boundary tones are used in vocatives and confirmation questions, the latter of which is exemplified in Figure 10.

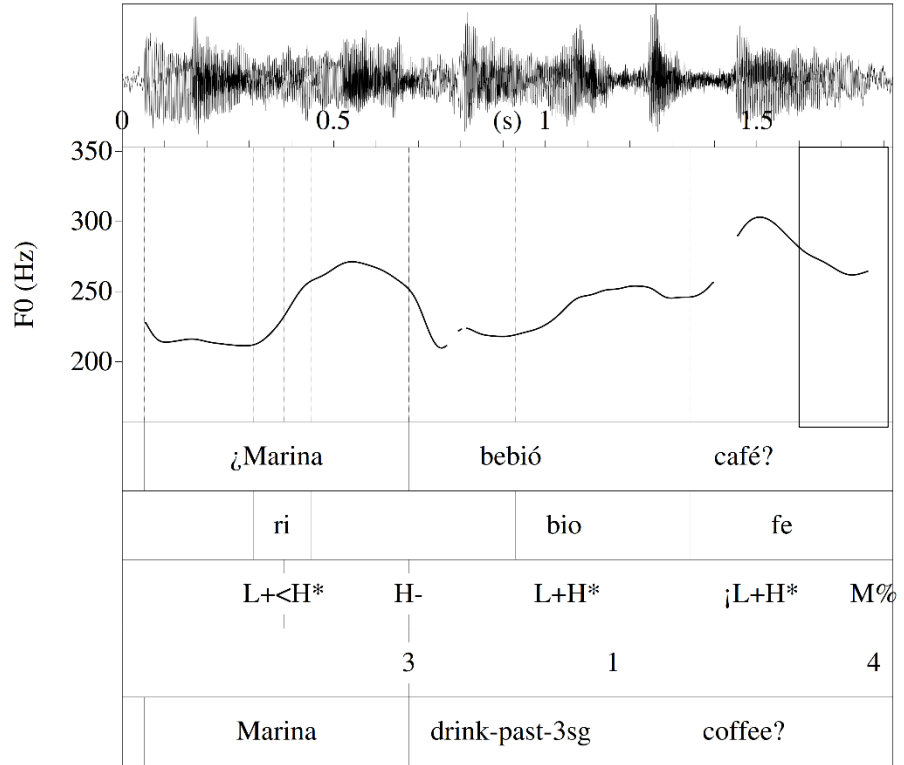
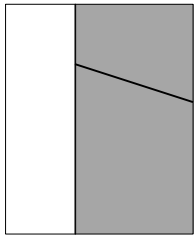


Figure 10. Schematic representation of M% (left) and waveform and pitch track of confirmation question (right) with M% boundary tone indicated with a box.

Figure 11 juxtaposes minimal pairs between H% and M% and L% and M%. Figures 11a (H%) and 11c (L%) were interpreted as true questions and Figures 11b and 11d (M%) were interpreted as a biased or confirmation questions.

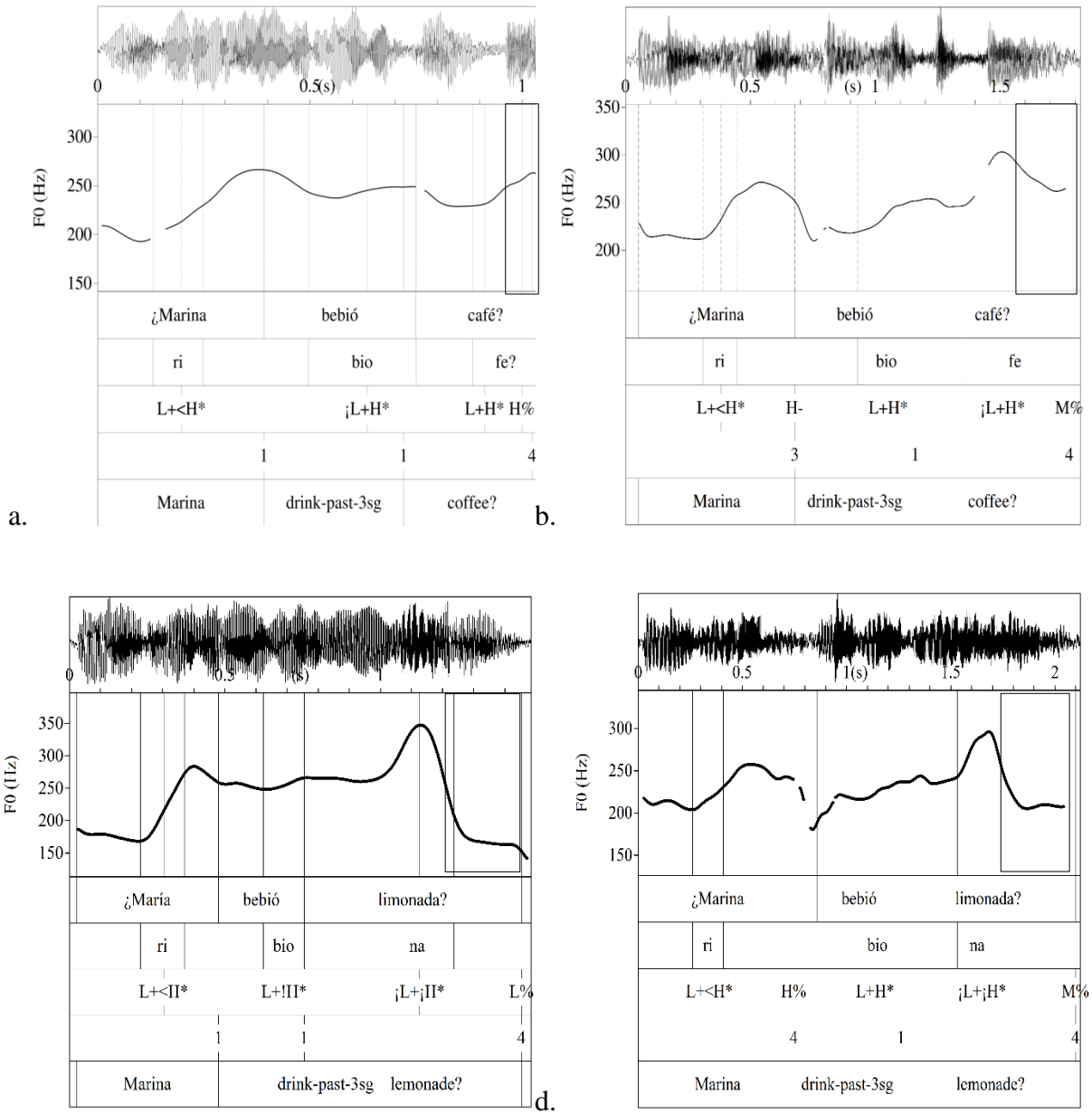


Figure 11. Minimal pair between H% (a) and M% (b), followed by minimal pair between L% (c) and M% (d). Boundary tones indicated with boxes.

Mid ip boundary tones (M-) are much rarer than H- and L- and are typically seen for within-IP vocatives and at non-prosodic boundaries, such as hesitations. Like M%, M- is only realized with a falling F0 from a high nuclear pitch accent. Figure 12 shows an example of M- in

an utterance containing vocative and imperative. The M- boundary tone occurs after the vocative with a slight F0 fall from the high nuclear pitch accent, but there is no pause or substantial lengthening (as seen in IPs) after the boundary tone. Without the M- boundary tone here, no fall in F0 would be expected between the high tonal targets in L+H\* on *María* and *ven*.

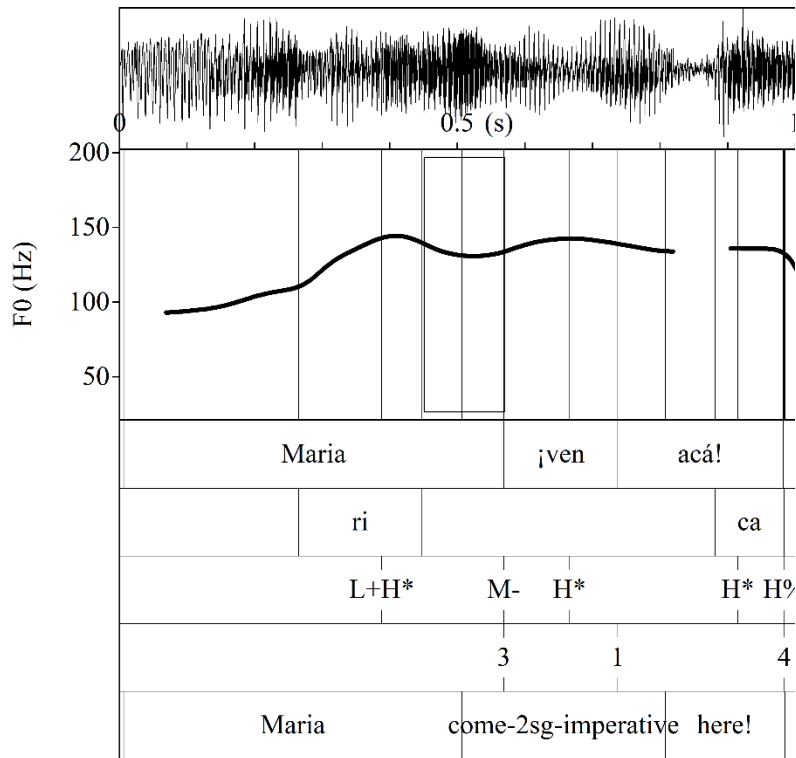


Figure 12. Waveform and pitch track of vocative and imperative, with M- boundary tone present after the vocative. M- is indicated with a box.

### 3.2.2 Prenuclear Pitch Accents

One pre-nuclear pitch accent was found in the Miami Cuban Spanish data, with three allotones. All pre-nuclear pitch accent variants are bitonal rising pitch accents which differ in whether the peak or valley is aligned with the stressed syllable. The most frequent pre-nuclear pitch accent, which will be referred to as the default pre-nuclear accent, was a rising pitch accent

in which the valley (F0 minimum) was aligned with the stressed syllable before rising on the following syllable (L\*+H). In stress clash environments in which the full bitonal pitch accent cannot be realized due to stress on an adjacent syllable across word boundaries, L\*+H may be realized either as a low monotonal pitch accent (L\*) or a high monotonal pitch accent (H\*) when adjacent to another stressed syllable, as shown in Figure 13. L\*+H can also be realized with *upstep* (when a phonologically low or high tone is realized with an F0 that is phonetically higher than a previous value; marked with the upside-down exclamation point ‘¡’, such as ¡L\*+H) or with *downstep* (when a phonologically high tone is realized with an F0 that is phonetically lower than a previous high value; marked with an exclamation point ‘!’, such as L+!H\*). Downstep or upstep can occur either on the stressed syllable, the trailing tone, or on both tones, as seen in Figures 11cd (both tones upstepped) and Figure 13 (only one tone up/downstepped). However, as realizations with upstep or downstep do not change meaning in pre-nuclear position across different discourse categories (for example, *wh*-questions produced with upstepped prenuclear pitch accents are still interpreted as *wh*-questions), these variants are allotones to L\*+H (the *toneme*). L\*+H comprised 65% of all pre-nuclear pitch accents labeled<sup>1</sup> ( $n = 791$ ). Figure 13 shows a schematic representation of L\*+H (shaded area represents stressed syllable) as well as four realizations of L\*+H: starting from the left is the typical realization of L\*+H (on *Lorena*), followed by downstepped variant, L\*+!H (*mide*), monotonal, L\* (due to stress clash, on *quién*) and upstepped, ¡L\*+H (on *mide* following *quién*).

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<sup>1</sup> This total does not count pre-nuclear pitch accents with focus or final stress, which were realized with L+H\*

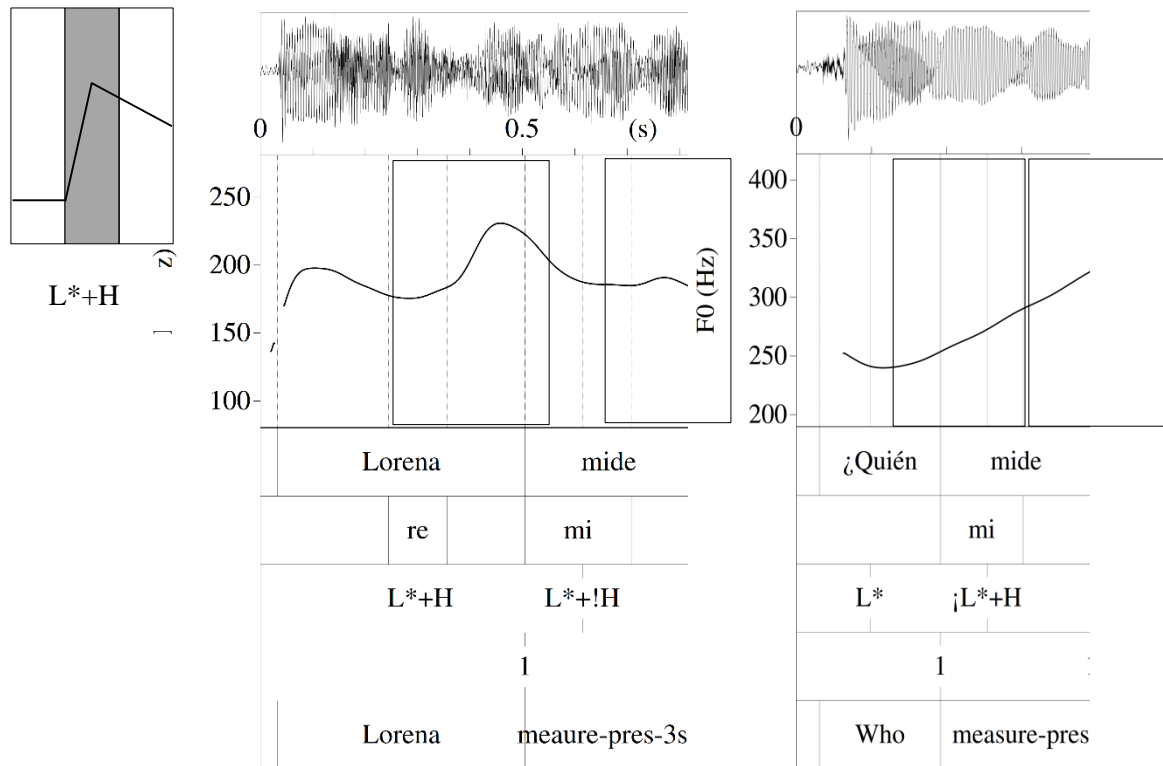


Figure 13. Schematic representation of  $L^*+H$  (far left), followed by four realizations of  $L^*+H$ : typical realization on Lorena, downstepped variant ( $L^*+!H$ ) on mide, monotonal realization ( $L^*$ ) due to stress clash between *quién* and *mide*, and upstepped variant (*¿* $L^*+H$ )

The second most frequent pre-nuclear pitch accent was a bitonal rising pitch accent with a delayed peak ( $L+<H^*$ ).  $L+<H^*$  is realized with a rising F0 in which the F0 minimum was realized on the pre-tonic syllable (the syllable before the stressed syllable) and the F0 maximum (peak) was realized on the post-tonic syllable (the syllable following the stressed syllable).  $L+<H^*$  occurred in 21% of overall data, but more frequently in controlled speech (32% of pre-nuclear pitch accents from Task 1) than semi-spontaneous speech (17% of pre-nuclear pitch accents in Task 2). However, because the meaning of utterances containing  $L^*+H$  and  $L+<H^*$  as pre-nuclear pitch did not change (e.g. declaratives with  $L^*+H$  and/or  $L+<H^*$  were produced freely by speakers and were not interpreted as having different meanings),  $L+<H^*$  will be considered a pre-nuclear pitch accent in free variation with  $L^*+H$  that is realized more frequently



in slower, more formal speech styles. Figure 14 shows an example of a  $L+<H^*$  prenuclear pitch accent in a declarative.

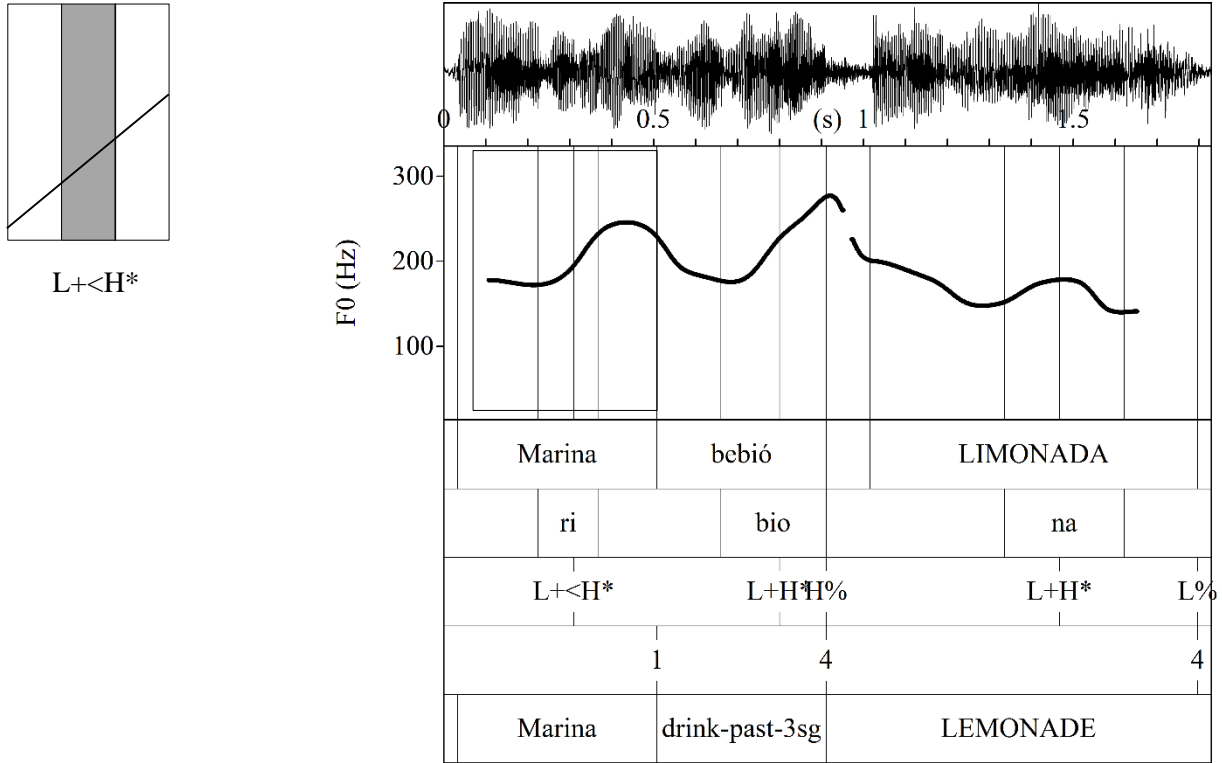


Figure 14. Schematic representation of  $L+<H^*$  (left) and waveform and pitch track of declarative statement with  $L+<H^*$  prenuclear pitch accent, indicated with a box.

The final and least frequent type of pre-nuclear pitch accent is a rising bitonal pitch accent in which the F0 peak is realized within the stressed syllable ( $L+H^*$ ). As a pre-nuclear pitch accent,  $L+H^*$  occurred in 14% of all data analyzed. However,  $L+H^*$  occurred as the default pitch accent for words with stress on the final syllable. Figure 15 shows both a schematic representation of  $L+H^*$  as well as an excerpt of an exclamative statement which has three words with final stress realized as  $L+H^*$ , two of which are realized with downstep ( $L+!H^*$ ).

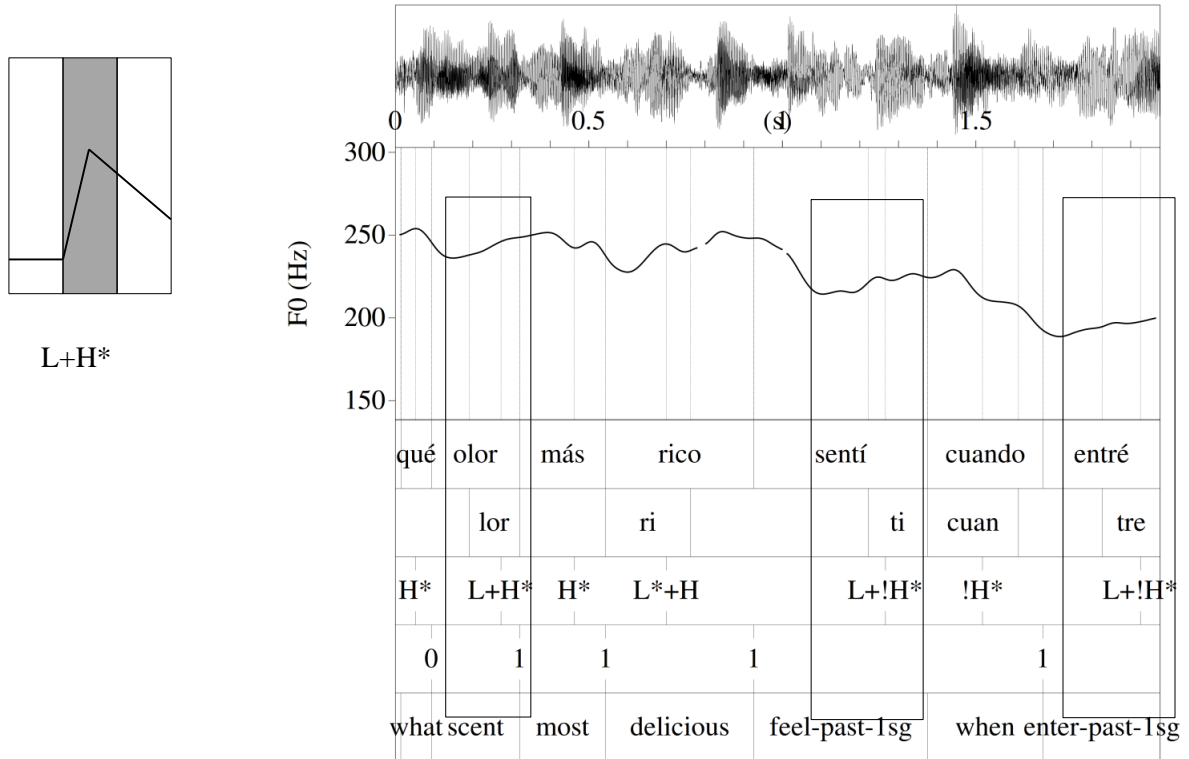


Figure 15. Schematic representation of L+H\* (left) and waveform and pitch track of exclamative statement portion (¡Ay) qué olor más rico sentí cuando entré (aquí del pan!), (Wow, what a great smell I felt when I walked in of the bread!). The three words with final stress are indicated with boxes.

### 3.2.3 Timed and Delayed Peaks

In order to establish the difference between timed high peaks (as found in L+H\*) and delayed high peaks (L+<H\*), the distance in milliseconds (ms) between the peak and its associated syllable was measured for 100 instances each of L+H\* and L+<H\*. The delayed peaks measured were balanced between Task 1 and Task 2, but due to the nature of Task 1 (few stimuli had words with final stress), the timed peaks (L+H\*) measured were not able to be balanced between tasks. 22 instances of L+H\* were measured from Task 1 and the remaining 78 from Task 2.

Figure 16 below demonstrates a schematic representation of how the distance between the peak and the end of the associated syllable was measured for each pitch accent.

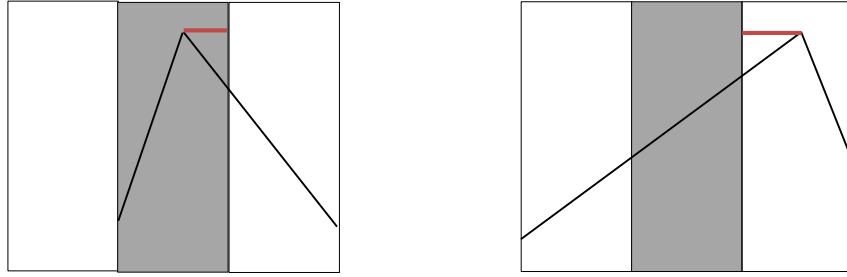


Figure 16. Distance from F0 peak and end of associated syllable, indicated with red line for  $L+H^*$  (left) and  $L+<H^*$  (right).

Measurement of timed and delayed peaks was done in *Praat* by marking the F0 peak and end of associated syllable as shown in (14) in an interval tier. The durations of the labeled intervals were then measured using a script which records durations in milliseconds for all non-empty intervals in a given interval tier. The results of these measurements revealed an average distance of 71 ms (SD 58 ms) between the peak and end of associated syllable for  $L+H^*$  and -54 ms (SD 41 ms) for  $L+<H^*$ . A paired-samples t-test was administered and revealed a significant difference between pitch accent types,  $t(99) = 2.8$ ,  $p = .006$ . Delayed peaks were realized later than the associated syllable with a lesser distance from the syllable edge on average than timed peaks, which were further from its associated syllable's edge. The following graph shows the distribution of the peaks measured, with the x-axis representing the duration in ms of the peak from the associated syllable's edge (negative for delayed peaks, positive for timed peaks) and the y-axis reports the frequency of the peaks at the various durations.

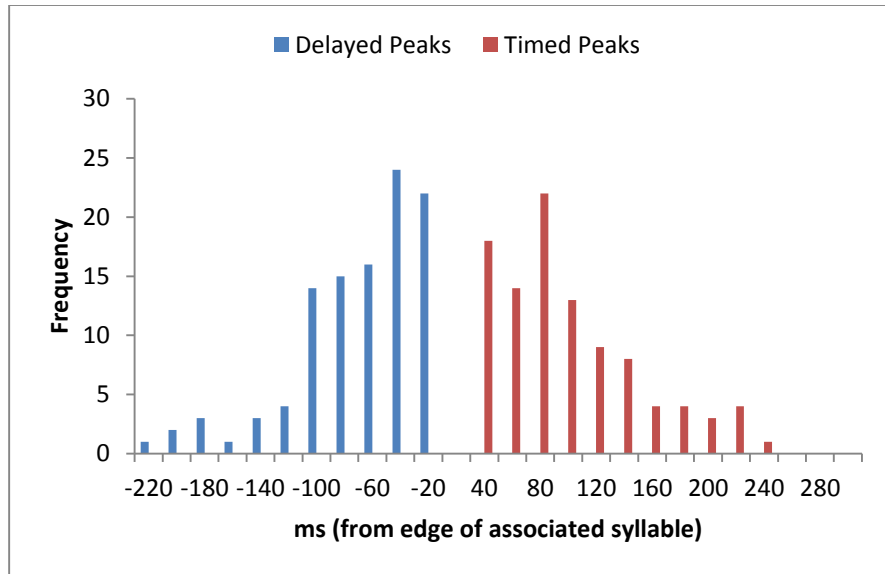


Figure 17. Graph showing distribution of delayed and timed peaks.

This section has proposed three pitch accents that appear in pre-nuclear position:  $L^*+H$ , which is the default, occurring for 65% of all pre-nuclear pitch accents measured;  $L+<H^*$ , which occurs in free variation with  $L^*+H$  and more frequently in controlled speech, which accounted for 21% of all pre-nuclear pitch accents; and  $L+H^*$ , which occurs primarily on words with final stress in pre-nuclear position, account for 14% of pre-nuclear pitch accents measured and was found more often in questions with higher pitch ranges in semi-spontaneous speech. All pre-nuclear pitch accents observed in the data have monotonal allotones that occur in environments of stress clash or changes in pitch range (for downstep and upstep). Table 2 breaks down the percentages of  $L^*+H$ ,  $L+<H^*$ , and  $L+H^*$  in pre-nuclear position for all observances and by task.

Pitch accent	All data ( $n=791$ )	Task 1 ( $n=177$ )	Task 2 ( $n=614$ )
$L^*+H$	65%	63%	66%
$L+>H^*$	21%	33%	17%
$L+H^*$	14%	4%	17%

Table 2. Percentage of pre-nuclear pitch accent in all data and in Tasks 1 and 2

### 3.2.4 Nuclear Pitch Accents

Three nuclear pitch accents were observed in the data. Unlike the pre-nuclear pitch accents, which were all bitonal, Miami Cuban Spanish has one monotonal nuclear pitch accent and two bitonal nuclear pitch accents. The discussion of nuclear pitch accent will follow the structure of that seen for boundary tones and pre-nuclear pitch accents and provide phonetic descriptions, schematic representations, and utterances from the data to exemplify them.

One monotonal pitch accent was found in nuclear position: low ( $L^*$ ).  $L^*$  pitch accents are realized with an  $F_0$  minimum (valley) in the final stressed syllable of the IP and are typically interpolated from a previous high target (such as  $L+H^*$  or  $L^*+H$ ).  $L^*$  nuclear pitch accents are typically found in questions ending in  $H\%$  boundary tones and may also be realized with upstep ( $\uparrow L^*$ ) if the pitch range of the question is raised. Figure 18 shows a schematic representation of  $L^*$  as well as a waveform and pitch track of a *wh*-question which contains  $L^*$  as a nuclear pitch accent.

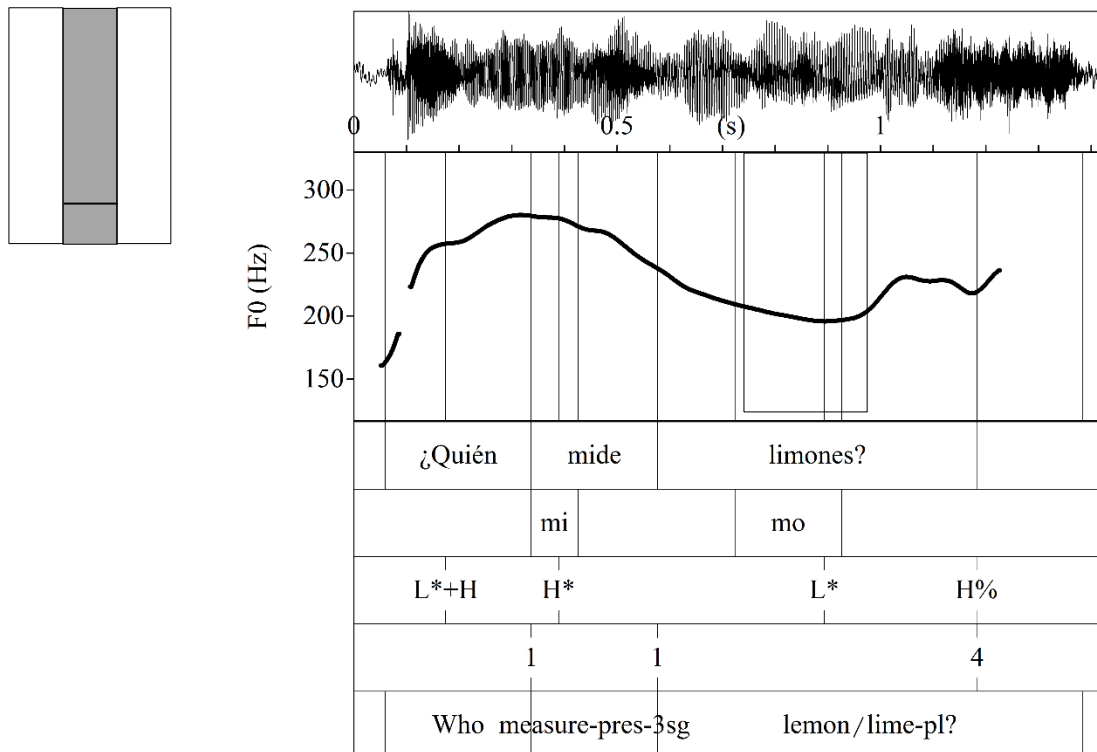


Figure 18. Schematic representation of  $L^*$  (left) and waveform and pitch track of a wh-question with an  $L^*$  nuclear pitch accent, indicated with a box.

Two bitonal nuclear pitch accents were observed in the Miami Cuban Spanish data: one rising bitonal pitch accent ( $L+H^*$ ) and one falling bitonal pitch accent ( $H+L^*$ ).  $L+H^*$  was the most common of all nuclear pitch accents observed, serving as the most frequent nuclear pitch accent for exclamatives, vocatives, several types of questions, and corrective focus. Similar to its pre-nuclear counterpart,  $L+H^*$  is realized with a lower F0 on the syllable preceding the last stressed syllable of the IP and contains an F0 peak within the stressed syllable. The nuclear F0 peak is commonly upstepped, ( $L+H^*$ ), making it the highest pitch event in the IP in these cases. However, nuclear  $L+H^*$  may also be realized with an F0 peak equal to those before it, with downstep ( $L+!H^*$ ), with the leading tone upstepped ( $¡L+H^*$  or  $¡L+¡H^*$ ), or as a monotonal pitch accent ( $H^*$ ), as seen in Figures 22 and , 6 respectively. The upstepped variants of nuclear  $L+H^*$

are more common in questions, where the overall pitch range tends to expand throughout the utterance. Figure 19 shows a schematic representation of L+H\* and a contextualized example of an upstepped ;L+;H\* in nuclear position in a confirmation question. Further investigation is needed to determine if additional meaning is implied in utterances with upstepped nuclear pitch accents.

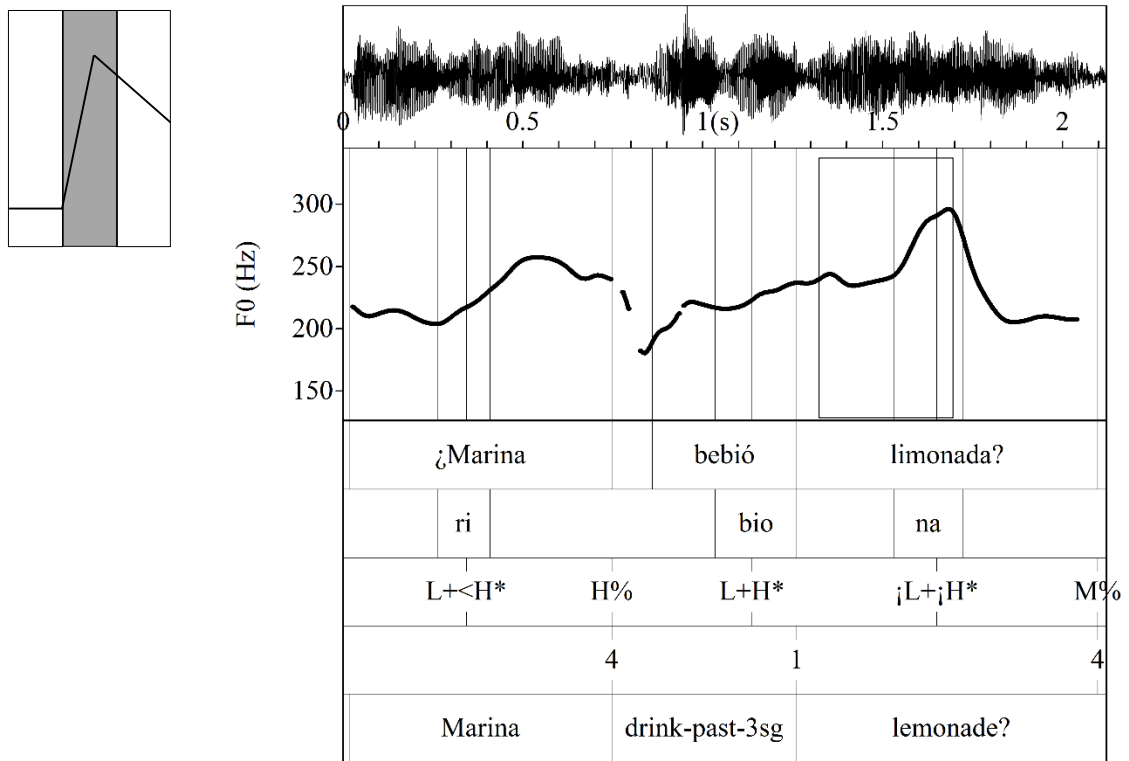


Figure 19. Schematic representation of L+H\* nuclear pitch accent (left) and waveform and pitch track (right) of a confirmation question with L+H\* nuclear pitch accent, indicated with a box.

The final nuclear pitch accent attested in the data was the falling bitonal pitch accent, H+L\*. H+L\* is realized with a sharp fall in pitch either occurring within the stressed syllable or before the stressed syllable, with an F0 valley on the stressed syllable. Unlike the other three nuclear pitch accents in the data (L\*, H\*, and L+H\*), H+L\* did not appear in pre-nuclear position (not even as an allotone of another pitch accent) and occurred in nuclear

position only for declaratives and indirect commands. Figure 20 shows schematic representations for both possible realizations of H+L\* (F0 fall before or within stressed syllable) and an example of a broad focus declarative statement with H+L\* as its nuclear pitch accent.

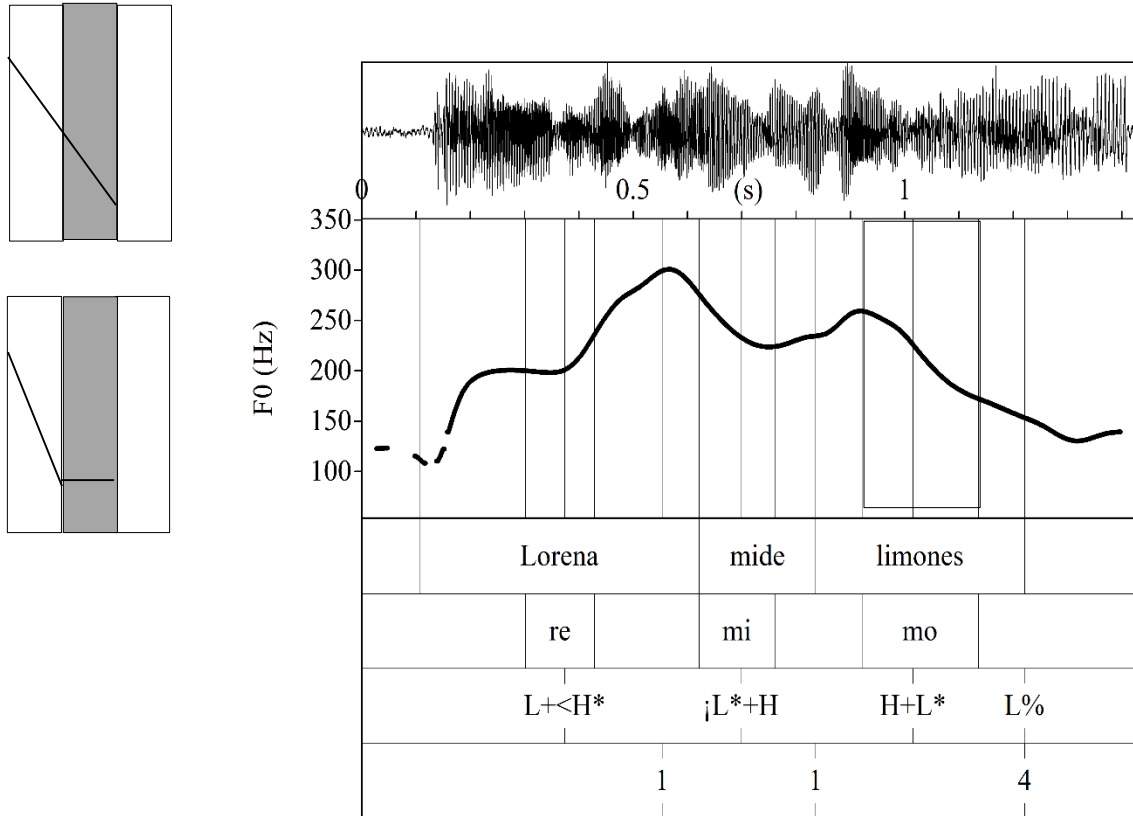


Figure 20. Schematic representations of H+L\* (left) and waveform and pitch track of broad focus declarative statement (right) with a H+L\* nuclear pitch accent (similar to the schematic on the top left) indicated by a box.



#### 4. Distribution of Tonal Inventory Across Discourse Categories

This section will discuss the most common nuclear contours (nuclear pitch accent and boundary tone) found across different discourse categories. Because the pre-nuclear pitch accents remained consistent across discourse categories, the combination of nuclear pitch accent and boundary tone helps create a nuclear contour which delivers various meanings. Section 4 will discuss broad focus statements first, followed by imperatives, questions, vocatives, exclamatives, enumerations, and will conclude with narrow focus.

##### 4.1 Broad Focus Declaratives

Broad focus declaratives were the most frequently produced utterance ( $n = 272$  of 751 total utterances analyzed) in the data collected, allowing for two distinct nuclear contours to emerge. The most common nuclear contour contained a falling bitonal nuclear pitch accent and a low boundary tone (H+L\* L%), which accounted for 62% of all broad focus data. The second, less frequent pattern featured a rising bitonal nuclear pitch accent and a low boundary tone (L+H\* L%), which comprised 35% of the data. The latter pattern (L+H\* L%) was primarily produced by Cuban-born speakers, who freely varied between both patterns, whereas Miami-Born speakers overwhelmingly produced broad focus declaratives with the falling nuclear pitch accent. Rising nuclear pitch accents in broad focus declaratives were typically downstepped, as the pitch range of declaratives tends to become lower and more compressed toward the end of the utterance (declination). Section 3 contains examples of both types of broad focus declaratives (Figure 3, L+H\* L% and Figure 20, H+L\* L%).

## 4.2 Imperatives

Imperatives are divided into two categories: imperative statements, which include commands with verbal morphology inflected for the imperative as well as indirect commands, which used impersonal expressions such as *necesito que tú* [verb] (I need [that] you [verb]) and *quiero que tú* [verb] (I want [that] you...); and requests, in which an imperative is expressed in the form of a question, often in a polite context.

### 4.2.1 Imperative Statements

Imperative statements patterned similarly to broad focus declaratives, with respect to the nuclear contours used, but with a reversal in frequency. Of all imperatives analyzed ( $n = 81$ ), 63% contained a rising bitonal nuclear pitch accent and low boundary tone (L+H\* L%) and 25% contained a falling nuclear pitch accent followed by a low boundary tone (H+L\* L%). There was a small number of imperatives ending in high boundary tones (H%) and these cases tended to be imperatives consisting of only a verb. Of the two more prevalent patterns, the more frequent pattern (L+H\* L%) tended to occur with imperatives consisting of a verb (with imperative inflection) and an object and the less frequent pattern (H+L\* L%) was observed more commonly for indirect commands. Figure 21 shows an imperative statement with a verb inflected for the imperative (true imperative).

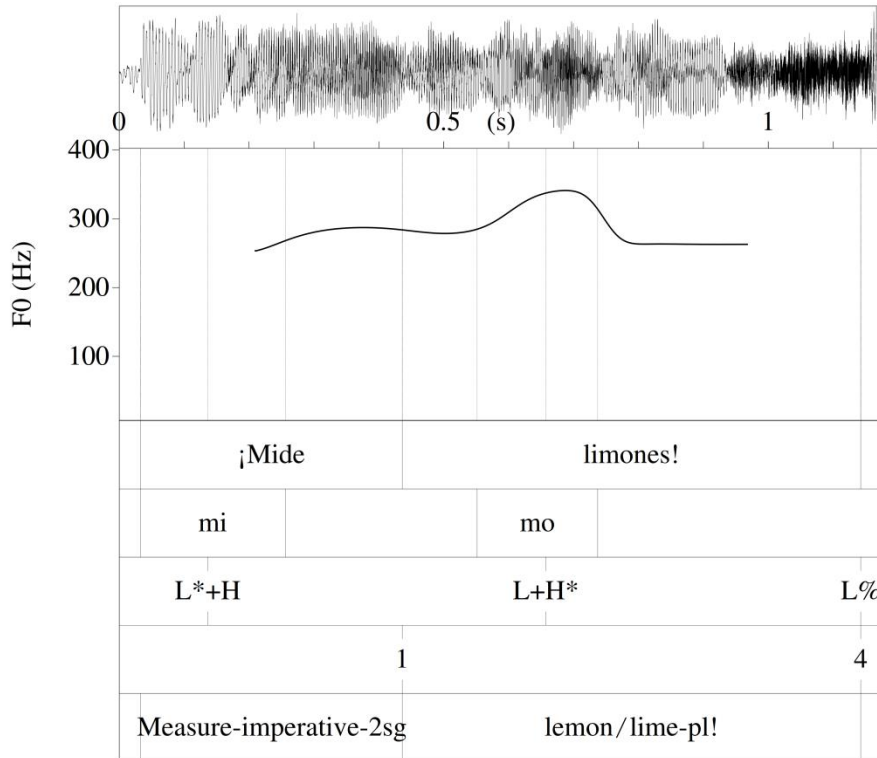


Figure 21. Imperative statement with  $L+H^* L\%$  nuclear configuration.

#### 4.2.2 Requests

The requests measured ( $n = 81$ ) had several characteristics: an overall raised pitch range, upstep of pitch accents throughout the utterance, and a high boundary tone at the right edge. 81% of requests measured had a nuclear pitch accent of  $L^*$  (if the stress was penultimate) or  $L+H^*$  (if stress was final), followed by a high boundary tone ( $H\%$ ). A small percentage of requests were realized with a low (17%) or mid boundary tone (2%), but judgments from native speakers have indicated that these requests sound more like confirmation questions (see Figure 10) than true requests. Additionally, if the pitch range of the whole utterance was expanded substantially, the nuclear pitch accent could be realized with upstep, as seen in Figure 22.

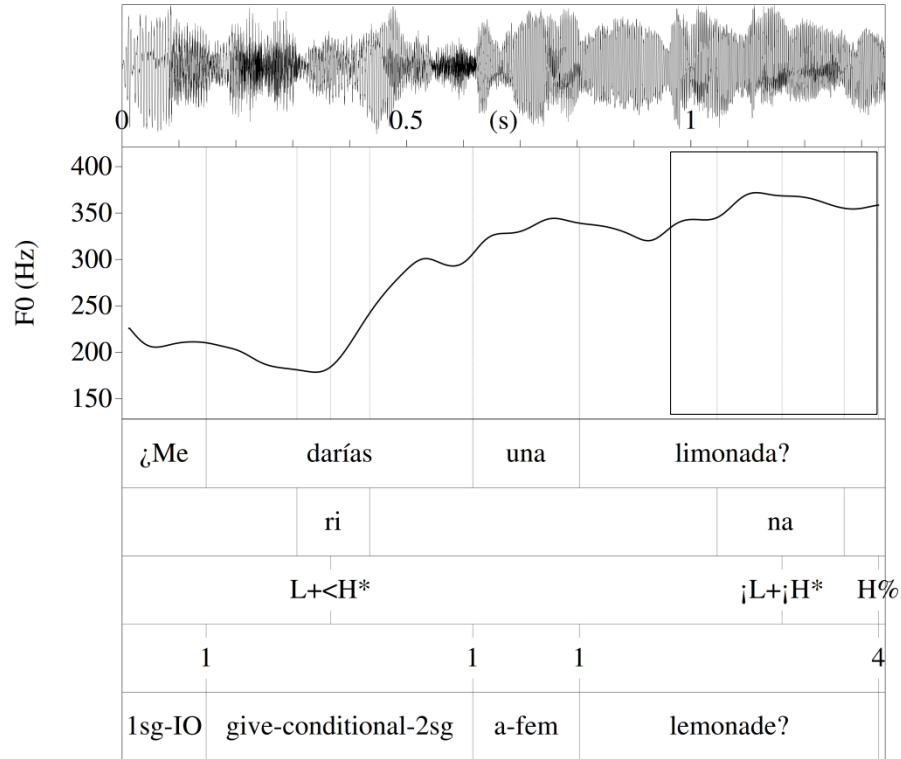


Figure 22. Request realized with expanded pitch range and upstep on the nuclear pitch accent, indicated with a box.

### 4.3 Questions

The six question categories that will be discussed in this section shared various intonational properties. Like requests, most questions were realized with an overall higher pitch range and upstep was common, although it is not yet clear whether upstep conveys additional meaning in a question.

#### 4.3.1 Yes/No Questions

Yes/no questions were those which did not contain any *wh*-words (such as *who*, *what*, *when*, etc) and could be answered with either *yes* or *no* (i.e. did not seek additional information). The yes/no questions analyzed ( $n = 124$ ) revealed two main nuclear contours. Similar to requests, the

nuclear pitch accent depended on location of stress in the word. The slightly more frequent nuclear contour contained a rising (L+H\*, if final stress) or low (L\*) nuclear pitch accent and a high boundary tone (H%), which accounted for 54% of yes/no questions. The second most frequent pattern also contained a rising nuclear pitch accent (L+H\*), but a low boundary tone (L%) and was observed in 39% of the data. Most speakers recorded used both variants in controlled and semi-spontaneous speech, suggesting free variation between L% and H% boundary tones for yes/no questions. A small percentage (7%) of yes/no questions ended in a mid (M%) boundary tone, which native speakers judged as confirmation questions (similar to the requests realized with M%). More judgments are needed in order to determine if M% has other functions besides indicating a biased or confirmation question. A yes/no question with the high boundary tone pattern is shown in Figure 10.

#### 4.3.2 Wh-questions

Wh-questions are questions which contain an interrogative word such as *who*, *when*, *why*, *what*, etc. Although these words do not start with *wh* in Spanish (as in English), their function is similar to *wh* words in English. Table 3 displays and glosses the common *wh* words used in Spanish.

Spanish <i>wh</i> word	English Gloss
quién	who
qué/cuál	what
por qué	why
cuándo	when
dónde	where

*Table 3. Common Spanish wh words*

The wh-questions analyzed ( $n = 81$ ) showed the same two nuclear contours found for yes/no questions (L+H\*/L\* H% and L+H\* L%), but with a different distribution. Whereas the yes/no

question data showed an almost even occurrence of both patterns, speakers used the high boundary tone variant (L+H\*/L\* H%) with more frequency for *wh*-questions. The high boundary tone variant comprised 68% of all *wh*-questions, in comparison with the low boundary tone variant, which occurred in 32% of *wh*-questions. When native speakers were presented with auditory stimuli featuring both patterns, the high boundary tone variant was judged unanimously as an acceptable *wh*-question, whereas the low boundary tone variant had mixed judgments, with some speakers preferring an echo question interpretation for this nuclear contour. Figures 5, 6, and 7 exemplify *wh*-questions ending in high boundary tones.

#### 4.3.3 Alternative questions

The alternative questions elicited ( $n = 34$ ) in the data involve the speaker giving the listener a binary choice from which to choose. These alternative questions, as well as other question types that showed disjunction when providing the listener a binary choice, shared several characteristics. Alternative questions typically had an IP boundary after each “choice” (e.g. *Do you want cake (IP) or ice cream (IP)?*). The IP boundary tone after the first choice was unanimously high (H%) and the subsequent IP typically had the nuclear configuration of a broad focus declarative (H+L\* L%). Figure 23 shows an example of an information seeking question with a binary choice (*hoy*, today or *mañana*, tomorrow).

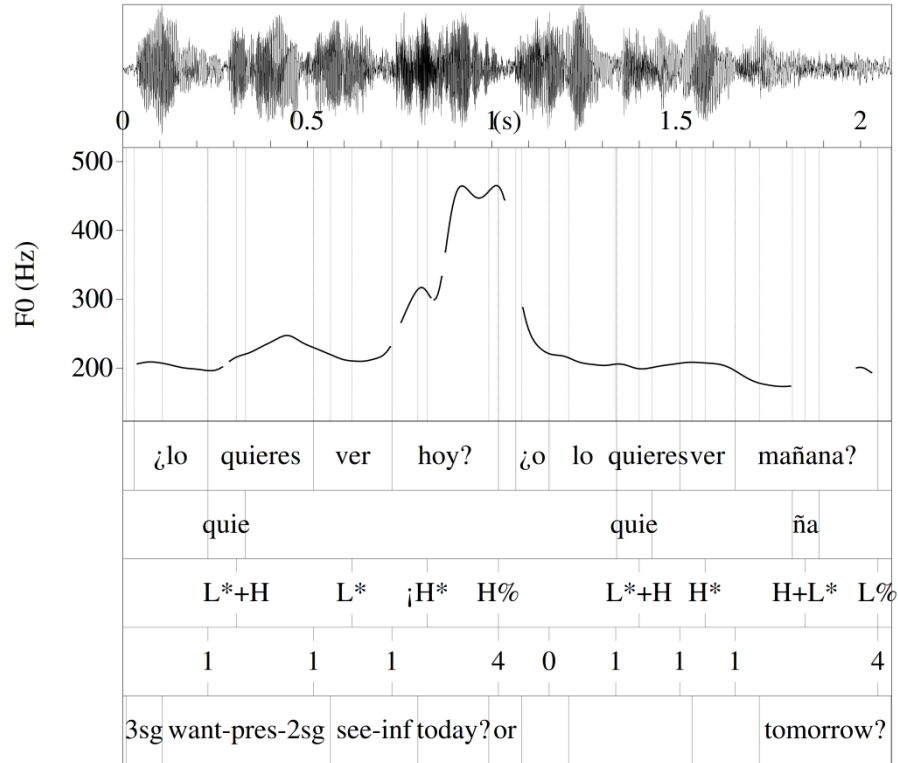


Figure 23. Waveform and pitch track of information seeking question with a binary choice, with H% after first choice and L% after second choice.

#### 4.3.4 Echo Questions

Questions were considered *echo questions* ( $n = 37$ ) in the present study if the speaker repeated all or most of the question back to the researcher in response to a prompt, such as not hearing or understanding someone, being surprised, or confirming unclear information. Due to similarities in the data, *wh* and non-*wh* echo questions were not distinguished as two separate categories. Echo questions patterned similarly to yes/no questions, as the two most frequent contours (L+H\* L% or L+H\*/L\* H%) were produced with almost equal frequency (53% for the high boundary tone pattern and 45% for the low boundary tone pattern). Also analogous to yes/no questions was the tendency for within-speaker variation with respect to these two patterns, suggesting free variation. Perceptual evidence from native speakers is needed in order

to establish any potential additional differences in meaning encoded by either of these two nuclear contours. Figure 24 shows an example of the low boundary tone variant for echo questions.

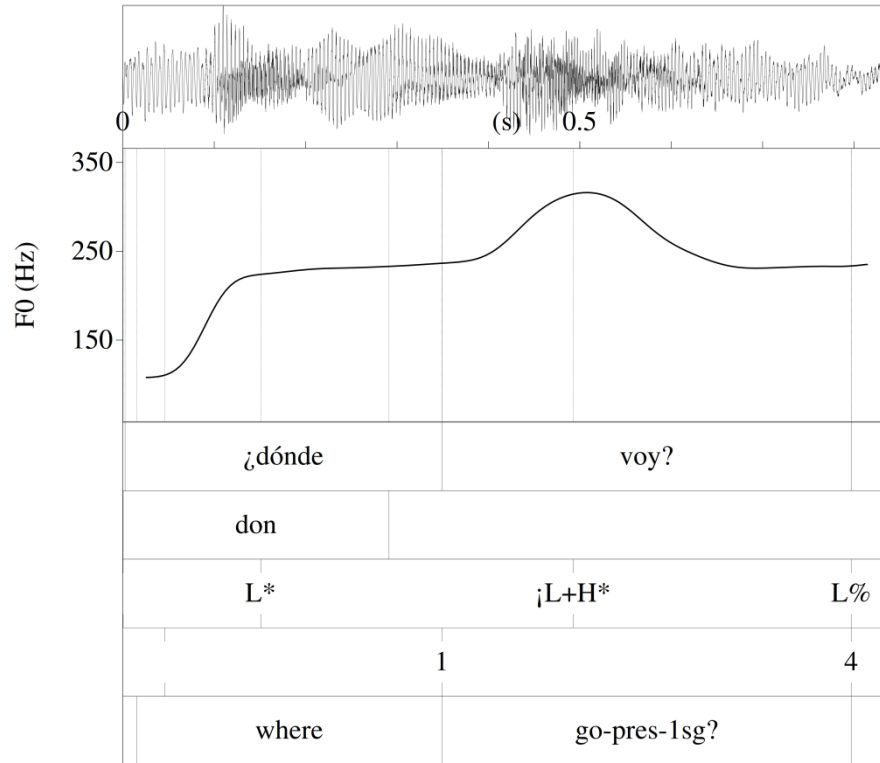


Figure 24. *Wh* echo question with L+H\* L% nuclear configuration.

#### 4.3.5 Tag Questions

The final question category that will be discussed is tag questions. In this data set, tag questions are broad focus utterances that have a one word “tag” at the end which changes the utterance from a declarative to a question, such as *María doesn't drink lemonade, **right?*** (tag phrase in bold). The tag questions analyzed ( $n = 16$ ) show consistent patterns, with the declarative portion of the utterance looking identical to a broad focus statement without a tag, and an overall lower pitch range with a rising (L+H\*) or falling (H+L\*) nuclear pitch accent.



However, either a low IP or ip (less lengthening, no pause) boundary may follow the nuclear pitch accent part of the declarative before the tag. The tag phrase is realized one of two ways: with L+H\* (if stress is penultimate) or L\* (if stress is final). Figure 25 shows this difference.

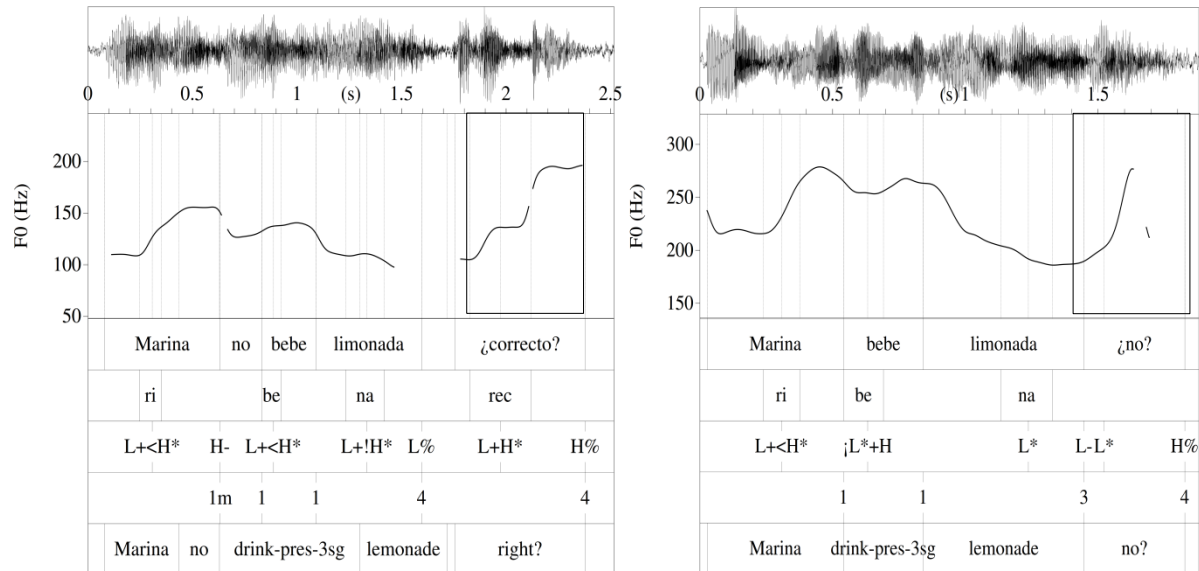


Figure 25. Tag phrases with penultimate stress (left) and final stress (right). Tag phrases are indicated with boxes.

#### 4.4 Vocatives

In Task 2 of data elicitation, speakers were instructed to either call for their dog or to call for a friend who is home, but not visible in her house. In both contexts, speakers were prompted to call for the dog or friend twice: once normally and once with more insistence. Two patterns emerged from the vocatives analyzed ( $n = 53$ ): Although all vocatives were produced with L+H\* (or H\* if stress was word-initial), normal vocatives were produced with a mid (M%) boundary tone and insistent vocatives were produced with a low (L%) boundary tone. This contrast is shown in Figure 26.

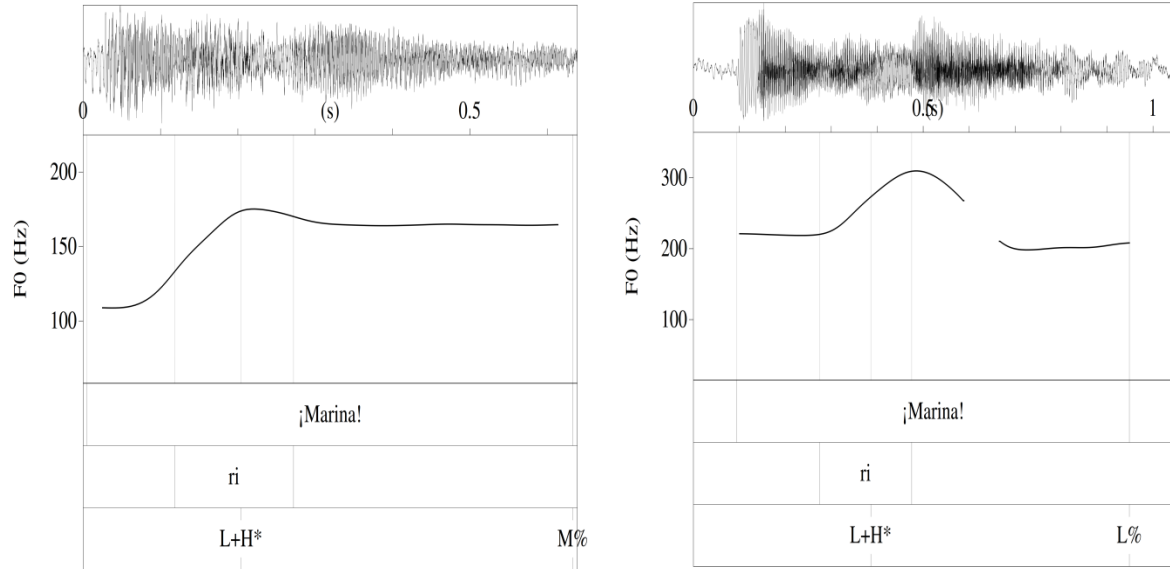


Figure 26. Normal vocative (left) with L+H\* M% contour and insistent vocative (right) with L+H\* L% contour.

#### 4.5 Exclamative Statements

Exclamative statements were elicited from speakers in Task 2 by prompting them to react to things such as the smell of bread, a good recipe, or how cold they felt. Exclamative statements containing imperatives within them were not included in this category. The predominant pattern (71%) of the exclamatives analyzed ( $n = 24$ ) is a rising nuclear pitch accent and low boundary tone (L%). A smaller percentage (12.5%) of exclamative statements were produced with a nuclear contour like a broad focus declarative (H+L\* L%), which could either be a less common variant of an exclamative or a less than enthusiastic performance by speakers when prompted to verbally exclaim about hypothetical situations.

#### 4.6 Enumerations

The final category to be discussed is enumerations. Only 12 enumerations were elicited from the current study's consultants, but these examples had consistent patterns. When speakers are

listing items, such as days of the week, the stressed syllable is typically realized with a low pitch accent (L\*) followed by a high boundary tone (H-). The final (nuclear) item in the list varies depending on the discourse category of the overall utterances: if it is a declarative list, the nuclear pitch accent follows the pattern of board focus declaratives (H+L\* L%), but if the list is in the form of a question, the nuclear pitch accent is typically L\*, followed by a high boundary tone (H%). An example of an enumeration can be seen in Section 3, Figure 8.

#### 4.7 Narrow Focus

Narrow focus (corrective focus, in the present study) was elicited from speakers in controlled speech by capitalizing words and instructing them to give these words emphasis and in semi-spontaneous speech by providing a context in which the speaker would have to clarify or correct a piece of established information. The narrow focus examples analyzed ( $n = 120$ ) showed consistent patterns, with 93% of all narrow focus being realized with a rising pitch accent (L+H\*). Additionally, the pitch range of the focus item was typically expanded, causing deaccenting on subsequent content words in the same IP. If the focused word had stress on its first syllable, H\* was a possible realization for the stressed syllable, suggesting that H\* is an allotone of L+H\* in these contexts.

IP and ip boundaries were also possible after focused words, occurring in approximately 50% of cases in which the focused item is not at the right edge of the IP. When longer words (3 or more syllables) with penultimate stress are focused, two alternative realizations were observed in the data: stress may either shift to the first syllable of the word, with the focused pitch accent occurring on that syllable or both the first and third syllable of the word may be stressed and realized with focus pitch accents. These observed patterns are displayed in Figure 27.

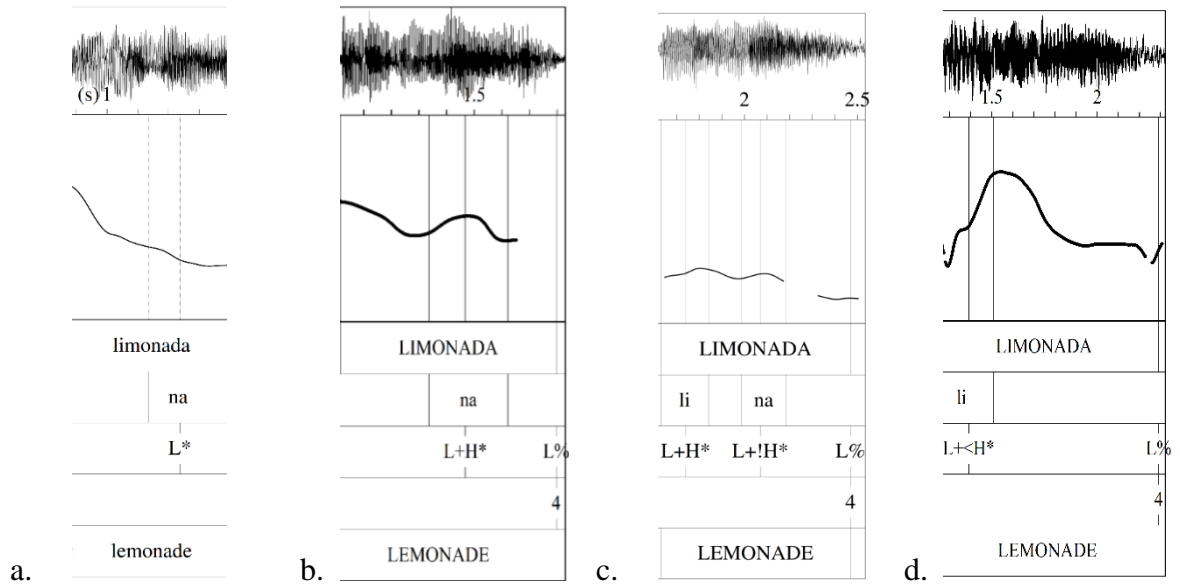


Figure 27. Excerpts of narrow focus statements with unfocused example for reference (a); typical narrow focus pattern (b); and optional realizations of narrow focus with two pitch accents (c) and with stress shifted to the first syllable (d).

Table 4 shows a summary of the nuclear contours and their percentages. In order to highlight consistent patterns, patterns comprising small percentages (less than 10%) are not included here.

Category	Nuclear contour(s)	Percentage of data
Broad focus	H+L* L%	62%
	L+H* L%	35%
Imperative	H+L* L%	63%
	L+H* L%	25%
Request	L*/L+H* L%	17%
	L*/L+H* H%	82%
Yes/no questions	L*/L+H* L%	39%
	L*/L+H* H%	54%
Wh-questions	L*/L+H* L%	32%
	L*/L+H* H%	68%
Info-seeking questions	L*/L+H* H%, H+L* L%	100%
Tag questions	L*/L+H* L%	100%
Vocatives-regular	L+H* M%	93%
Vocatives-insistent	L+H* L%	100%
Exclamative	H+L* L%	71%
	L+H* L%	13%
Enumerations	L* H-/H%	100%
Narrow focus	L+H*	93%

Table 4. Common nuclear contours and percentages

## 5. Discussion

The present study proposed an AM model of intonational phonology for Miami Cuban Spanish, consulting the data of nine speakers and two speaking styles. The results revealed an inventory of three boundary tones, one pre-nuclear pitch accent, and three nuclear pitch accents which resulted in only one illegal combination ((H+)L\* M%). All discourse categories elicited showed a predominant nuclear configuration, although variation within categories was also attested, as seen for broad focus declaratives, imperatives, and various types of questions.

More specifically, three sentence types (requests, yes/no questions, and *wh*-questions)<sup>2</sup> in Miami Cuban Spanish have both a high and low boundary tone variant, in which most speakers switch between the two without an apparent change in meaning. Questions ending in low boundary tones are a linguistic marker of Caribbean Spanish dialects, as reported in the Puerto Rican and Dominican ToBIs (Armstrong 2010 and Willis 2010, respectively). However, Alvord (2010) reports that Miami Cuban speakers associated high boundary tone questions in yes/no questions with the Cubans of lower socio-economic status who immigrated to Miami in the 1980s and 1990s (referred to in Spanish as *marielitos*, after the Mariel boatlift and *balseiros* ('rafters'), due to the common method of immigrating on rafts, doors, and other flotation devices) and low boundary tone questions in yes/no questions with the business owners and wealthier Cubans who immigrated to the US in the 1960s and early 1970s, at the beginning of Fidel Castro's regime (known in Spanish as the *Vuelos de Libertad*, 'freedom flights' group). In Alvord's (2010) analysis, speakers from the *marielitos* group used high boundary tones in

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<sup>2</sup> Echo questions also showed boundary tone variation, but the overall low number of echo questions, especially when divided by speaker made individual preferences difficult to analyze.

questions, whereas speakers from the *vuelos* group and Miami-born Cubans used the low boundary tones, even explicitly acknowledging the stigma that the high boundary tone carried.

The data in the present study also includes speakers from the three waves of immigration mentioned (*vuelos*, *marielitos*, and *balseros*) as well as Cuban-Americans, but their usage of high and low boundary tones was not as clearly predicted by generation/wave of immigration as in Alvord (2010). No speaker had a categorical preference across all three categories with variable boundary tones (requests, yes/no, and *wh*-questions) and speakers who showed categorical preferences for boundary tones within a category tended to prefer high boundary tones, regardless of generation or wave of immigration. Of the speakers who categorically preferred boundary tones, three of four speakers preferred high boundary tones for *wh*-questions (1M, 2M, 3F); three of five speakers preferred high boundary tones for yes/no questions (3F, 5F, 3M); and both speakers who categorically preferred high boundary tones for requests (2M, 5F). However, the three speakers who preferred low boundary tones categorically were two *marielitos* and a Miami-born (MB) speaker whose parents are *marielitos*: one preferred low boundary tones for *wh*-questions (3M) and two *marielitos* preferred low boundary tones for yes/no questions (4M, 1F). These preferences are displayed in Table 5 for clarity.

	H% boundary tones	L% boundary tones
Requests	2M ( <i>balsero</i> ); 5F ( <i>vuelo</i> )	---
Wh-questions	1M, 3F (MB); 2M ( <i>balsero</i> )	3M ( <i>marielito</i> )
Yes/no questions	3F (MB); 5F ( <i>vuelo</i> ); 3M ( <i>marielito</i> )	4M ( <i>marielito</i> ); 1F (MB)

Table 5. Categorical boundary tone preference by sentence type and speaker

The preference for high boundary tones by speakers of various generations/immigrant waves suggests that high boundary tones may not be as stigmatized as they were previously. Another possibility is that contact with other languages (such as English) or dialects of Spanish that use

high boundary tones more frequently in questions may be influencing the Miami Cuban dialect. Although persons of Cuban descent form the majority of the Hispanic population in Miami (US Census 2010), Miami also contains the largest populations of Colombians, Peruvians, and Hondurans in the US (Brown & Lopez 2013). Unlike MC Spanish, these non-Caribbean dialects<sup>3</sup> present in Miami employ high boundary tones in questions, based on data in Roseano & Prieto (2010). Interactions between the Caribbean and non-Caribbean communities in Miami may be influencing the social indexing and use of high boundary tones amongst Cuban Spanish speakers. Further research which investigates the language contact context in Miami in more detail with data from speakers of these dialects is needed to provide definitive evidence for dialect contact as a source of the higher use of high boundary tones cross-generationally in Miami Cuban Spanish.

When the tonal inventory and distribution of Miami Cuban Spanish is compared with that found in the Pan Spanish\_ToBI and other Caribbean island varieties (e.g. Puerto Rican Spanish, Dominican Spanish), several patterns emerge. As previously mentioned, all three Caribbean Island varieties reported low boundary tone questions, which are a marker of Caribbean Spanish, even to linguistically naïve speakers. The three Caribbean Island dialects also share a default pre-nuclear pitch accent (L\*+H), which differs from the delayed peak default prenuclear pitch accent (L+<H\*) reported in the Pan\_Spanish ToBI. Miami Cuban Spanish does not share any common nuclear contours with Dominican Spanish, but has several in common with the Pan\_Spanish and Puerto Rican inventories: Miami Cuban, Pan\_Spanish, and Puerto Rican Spanish share the same nuclear contours for imperatives, vocatives, and exclamatives. Additionally, Miami Cuban and

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<sup>3</sup> The dialect of Spanish spoken on the Caribbean coast of Colombia has features in common with the Caribbean, but the rest of Colombia is considered a *tierras altas* dialect

Puerto Rican Spanish also share nuclear configurations for broad focus declaratives, narrow focus, echo questions and yes/no questions. Although Miami Cuban Spanish shared various nuclear configurations with the dialects mentioned, its tonal inventory was smaller overall, with no bitonal or tritonal boundary tones and few monotonal pitch accents (apart from undershot targets). Table 6 summarizes the nuclear contours reported for Miami Cuban, Pan\_Spanish, Puerto Rican, and Dominican dialects.

Type	Pan-Spanish	Miami Cuban	Puerto Rican	Dominican
Pre-nuclear pitch accent	L+<H*	L*+H		
Imperatives	L+H* L%		L* HL%	H+L* L%
Broad Focus	L* L%	H+L* L%		H+L* H%
		L+H* L%		L+H* H%
Narrow Focus			H* L%	L+H* LH%
		L+H* L%		H+L* L%
Vocative	L+H* M%			L+H* LH%
Insistent Vocative	<b>L+H*</b> <b>HL%</b>	L+H* L%	<b>L+H*</b> <b>HL%</b>	
Echo Question	L+H* LH%	L+(j)H* L%		H+L* L%
		L+H*/L* H%		
Wh-Question	H* L%	L+H* L%	H+L* L%	H+L* H%
		L+H*/L* <b>H%</b>		<b>L* H%</b>
Exclamative			L* M%	L+H* LH%
		L+H* L%		
Request	H+L* L%	L+H*/L* H%	L* M%	jL+H* M%
				H+L* L%
Yes/No Questions	L* H%			H+L* H%
		L+(j)H* L%		H+L* L%
Tag question		L* H%		
		L+H* H%		
Confirmation question	L+H* LH%	L+H* M%	H+L* L%	
				H+L* H%

Table 6. Nuclear pitch accent and boundary tones of categories across Caribbean dialects, Pan-Spanish ToBI



## 6. Future Directions

There are several possible paths for future research on Cuban Spanish. Data from a more socioeconomically diverse group of speakers residing in south Florida (both Cuban and non-Cuban) could provide insights for predicting the variation seen, particularly in questions. Because contact with English was a possible source of question variation in this dialect, further analysis of bilingual intonation systems (of both related and unrelated languages in contact) which investigates the intonation of both languages and how it differs from the system of monolinguals would be helpful for investigating the compromises or adjustments made in the bilingual system at the phonological level. Finally, data from Cuban speakers currently residing in Cuba could shed light on any differences or changes in Miami Cuban Spanish, a vernacular that has been established for nearly five decades.

## 7. Appendix

### A. Task 1 (Reading Task)

Lea las frases en voz alta como si estuviera hablando con un(a) amig(a).  
'Read the phrases out loud, as if you were talking with a friend'.

Parte 1 'Part 1':

#### a.

- Juanita tocaba perritos. 'Juanita petted puppies.'
- Médicos veían ovejas. 'Doctors saw sheep.'
- Científicos examinan girafas. 'Scientists examine giraffes.'
- Lorena miraba iguanas. 'Lorena watched iguanas.'
- Bernabé veía limones. 'Bernabé saw lemons.'

#### b.

- Veían médicos ovejas. 'Doctors saw sheep.'
- Están examinando girafas. 'They are examining giraffes.'

- Miraba Bernabé iguanas. ‘Bernabé watched iguanas.’
- Compraban ellos pescado. ‘They bought fish.’
- Veía Marina limones. ‘Marina saw lemons.’
- Pagaba Juanita abogados. ‘Juanita paid lawyers.’

**c.**

- Veían iguanas médicos. ‘Doctors saw iguanas.’ \ ‘Iguanas saw doctors.’
- Cocinaba pescados Juanita. ‘Juanita cooked fish.’
- Miraba ovejas Lorena. ‘Lorena watched sheep.’
- Tocaban llamas científicos. ‘Scientists petted llamas.’
- Veía limones Bernabé. ‘Bernabé saw lemons.’
- Navegan barcos abogados. ‘Lawyers sailed (on) ships.’

Parte 2 ‘Part 2’:

**a.**

- Toma limonada horrible. ‘Drink horrible lemonade.’
- Están tomando también. ‘They are drinking too.’
- Tomaba limonada horrible. ‘She/He drank horrible lemonade.’
- Estás tomando también. ‘You are drinking too.’
- Tomaría limonada horrible. ‘She/He would drink horrible lemonade.’
- Toman algo también. ‘They drink something too.’
- Tomaríamos limonada horrible. ‘We would drink horrible lemonade.’

**b.**

- Ayudó el águila bonita. ‘She/He helped the beautiful eagle.’
- Ayuda el águila bonita. ‘She/he helps the beautiful eagle.’
- Mirábamos el águila bonita. ‘We looked at the beautiful eagle.’
  
- Mirábamos arañas enormes. ‘We looked at enormous spiders.’
- Mirábamos marabús bonitos. ‘We looked at beautiful marabouts.’
- Veían peces numerosos. ‘We saw numerous fish.’
- Capturaban peces numerosos. ‘They captured numerous fish.’

Parte 3 ‘Part 3’:

- Marina bebió limonada. ‘Marina drank lemonade.’
- ¿Quién bebió limonada? ‘Who drank lemonade?’
- ¿Marina bebió limonada? ‘Did Marina drink lemonade?’
- ¡Bebe limonada! ‘Drink lemonade!’

- ¿Me das una limonada? ‘Could you give me lemonade?’
  - ¿Me darías una limonada? ‘Would you give me lemonade?’
  - Marina bebe limonada, ¿no? ‘Marina drinks lemonade, right?’
  - Marina no bebe limonada, ¿correcto? ‘Marina doesn’t drink lemonade, correct?’
- 
- Lorena mide limones. ‘Lorena measures lemonade.’
  - ¿Quién mide limones? ‘Who measures lemons?’
  - ¿Lorena mide limones? ‘Lorena measures lemonade?’
  - ¡Mide limones! ‘Measure lemons!’
  - ¿Me das un limón? ‘Give me a lemon?’
  - ¿Me darías un limón? ‘Would you give me a lemon?’
  - Lorena mide limones, ¿no? ‘Lorena measures lemons, right?’

#### Parte 4 ‘Part 4’:

- Marina bebió limonada. ‘Marina drank lemonade.’
  - (¿Quién bebió limonada?) MARINA bebió limonada.  
‘(Who drank lemonade?) Marina drank lemonade.’
  - (¿Qué bebió Marina?) Marina bebió LIMONADA.  
‘(What did Marina drink?) Marina drank lemonade.’
  - (¿Qué hace Marina con la limonada?) Marina BEBIÓ limonada.  
‘(What does Marina do with the lemonade?) Marina drank lemonade.’
  - (¿Qué hace Marina?) Marina BEBIÓ LIMONADA.  
‘(What does Marina do?) Marina drank lemonade.’
- 
- ¿Juan bebe limonada? (No,) MARINA bebe limonada.  
‘Juan drinks lemonade? (No,) Marina drinks lemonade.’
  - ¿Marina bebió café? (No,) Marina bebe LIMONADA.  
‘Marina drank coffee? (No,) Marina drinks lemonade.’
  - ¿Marina prepara limonada? (No,) Marina BEBE limonada.  
‘Marina prepares lemonade? (No,) Marina drinks lemonade.’
  - ¿Marina prepara café? (No,) Marina BEBE LIMONADA.  
‘Marina prepares coffee? (No,) Marina drinks lemonade.’

#### B. Task 2 (Discourse Completion Task)

**Encuesta Español Cubano ‘Cuban Spanish Survey’  
(modified for Cuban Spanish with permission from Pilar Prieto)**

**1. DECLARATIVAS ‘Declaratives’**

**1.1. Neutra ‘Neutral’**

**Oraciones de una unidad tonal ‘Sentences with one tonal unit’**



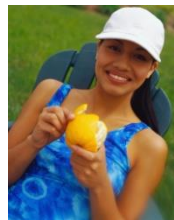
1. Mira el dibujo y di lo que hace la mujer.

‘Look at the drawing and say what the woman is doing.’

2. Ana te está contando que ayer se tomó una limonada. En este momento llega otro amigo y te pregunta qué dice Ana.

‘Ana is telling you that yesterday she drank lemonade. At this moment, another friend arrives and asks you to tell him what Ana said.’

**Oraciones de más de una unidad tonal ‘Sentences with more than one tonal unit.’**



3. Mira el dibujo y di lo que ves.

‘Look at the drawing and say what you see.’



4. Mira el dibujo y di lo que ves.

‘Look at the drawing and say what you see.’

**Enumeraciones ‘Enumerations’**

5. Di los días de la semana. ‘Say the days of the week.’

6. Di qué almorzaste. ‘Say what you had for lunch.’

**Elementos periféricos (dislocaciones, vocativos, elementos parentéticos, aposiciones)**

## Peripherals (dislocations, vocatives, parenthetical elements, appositions)

7. Imagínate que acabas de conocer a alguien de Hialeah y resulta que tú viviste allá muchos años. ¿Cómo se lo dirías?

‘Imagine that you have just met someone from Hialeah and, as it turns out, that you lived there for many years. How would you tell this person?’

8. Estás en casa con tu hija, María, que está mirando la televisión. Dile que vas a salir un momento de compras.

‘You are at home with your daughter, María, who is watching television. Tell her that you are going out for a while to shop.’

9. Estás enfermo y esta mañana tuviste que ir al médico. Di que has ido a pesar de la lluvia.

‘You are sick and this morning you had to go to the doctor. Say that you have done this, despite the rain.’

10. Conoces a dos muchachas que se llaman Marina, una rubia y otra morena. Di que hoy (viste) a la morena. ‘You know two young women named Marina, a blonde and a brunette. Say that you saw the brunette today.’

### 1.2. No neutral ‘Not neutral/biased’

#### Focalización contrastive ‘Contrastive Focus’

11. Entrás en una plaza de mercado y la mujer que trabaja ahí es un poco sorda.

‘You enter a shopping center and the woman that works there is a bit deaf.’

A. *Quiero una libra de limones ‘I want a pound of lemons.’*

B. *¿De manzanas? ‘[a pound] Of apples?’*

#### Énfasis ‘Emphasis’

12. Entrás a una panadería y notas un rico olor) olor a pan. Díselo a la (muchacha) que atiende la panadería.

‘You enter a bakery and you note the rich scent of bread in the air. Comment on this to the woman who is working in the bakery.’

#### Declarativa categórica ‘Categorical declarative’

13. Tú y una amiga están hablando de unos tipos que están buscando apartamento, y ustedes no están seguros de dónde van a vivir. Estás segura que se van a vivir en Kendall pero tu amiga piensa – también bastante segura- que se van a mudar a Cutler Ridge. Dile, seguro, que no, que se mudan a Kendall.

‘You and a friend are talking about some individuals who are looking for an apartment and neither of you are sure about where they are going to live. You are sure that they are going to live in Kendall, but your friend, who is also very sure, says that they are moving to Cutler Ridge. Tell her, with confidence, that they are not, that they are moving to Kendall.’

### **Declarativa dubitativa ‘Uncertainty statement’**

14. Te encargaron comprar un regalo para alguien que no conoces mucho y te preocupa no hacer una buena compra. Dile a la persona que te hizo el encargo que quizás no le guste el regalo que compraste.

‘They have left you in charge of buying a gift for someone you don’t know very well and you are worried about that you might not make a good buy. Tell the person who put you in charge that maybe they will not like the present that they bought.’

### **Declarativa de obviedad ‘Obviousness statement’**

15. Estás con una amiga y le cuentas que María, una amiga en común, está embarazada. Ella te pregunta de quién está embarazada y te extrañas mucho de que no lo sepa porque todo el mundo sabe que es de Guillermo, su novio de toda la vida. ¿Qué le dices?

‘You are with a friend and you tell her that María, a mutual friend, is pregnant. She asks you whose child she is having, and it is strange to you that she does not know because everyone knows it is Guillermo, her lifelong boyfriend, with whom she is having the baby. What do you tell her?’

### **Declarativa exclamativa ‘Exclamatory statement’**

16. Te invitan a una cena y (es el mejor que te has comido en tu vida). Estás encantado. ¿Qué dices?

‘You are invited to dinner (and it is the best you have had in your life). You are enchanted. What do you say?’

17. Es la vez en tu vida que has tenido más frío. ¿Qué dices?

‘It is the coldest moment in your life. What do you say?’

## **2. INTERROGATIVAS ABSOLUTAS ‘ABSOLUTE INTERROGATIVES’**

### **2.1. Neutra ‘Neutral’**

#### **Oraciones de una unidad ‘Sentences with one (tonal) unit’**

18. Entrás a un mercado y le preguntas al empleado si tiene mermelada.

‘You enter a market and ask the employee if they have marmalade.’

19. Estás en la calle y quieres preguntar la hora.

‘You are on the street and you want to ask for the time.’

20. Pides permiso para pasar al consultorio donde te espera el médico.

‘You ask for permission to go to the office where the doctor is waiting for you.’

### **Oraciones de más de una unidad ‘Sentences with more than one (tonal) unit’**

21. Llamas por teléfono a casa de una amiga que se llama María pero no está. Más tarde llamas de nuevo, pero ella no contesta al teléfono. ¿Cómo preguntas si ya llegó?

‘You call your friend María’s house number but she is not home. Later you call again but she does not answer the phone. How do you ask if she has arrived?’

22. Organizaste una comida y decides cambiar la fecha para que todos los invitados puedan ir. Pregúntales si van a poder venir si la comida es el primer domingo de mayo.

‘You organized a dinner and you decide to change the date so that all the guests can come. Ask them all if they are going to be able to come if the dinner is the first Sunday of May.’

### **La disyunción ‘Disjunction’**

23. Para tu cumpleaños preparaste bizcocho y helado. Pregúntales a los invitados si quieren bizcocho o helado.

‘For your birthday, you prepared cake and ice cream. Ask the guests if they want cake or ice cream’

24. Tu hijo quiere visitar a su tío, y lo quieres acompañar. Pregúntale si va a ir hoy o mañana.

‘Your son wants to visit his uncle and you want to go with him. Ask him if he is going today or tomorrow’

### **Enumeraciones ‘Enumerations’**

25. Sabes que una prima lejana tuya tiene muchos hijos, pero no estás segura si son tres, cuatro, cinco o seis. Pregúntale a mamá.

‘You know that your distant cousin has a lot of kids, but you aren’t sure if she has three, four, five or six. Ask your mom’

### **Elementos periféricos ‘Peripheral elements’**

26. Estás buscando a María pero no la puedes encontrar. Te cruzas con alguien que la conoce y después de hablar un poco sobre ella le preguntas si la ha visto.

‘You’re looking for Maria but you can’t find her. You run into someone else that knows her and after talking a bit about Maria you ask the person if she/he has seen her’

### **2.2 No neutra ‘Not neutral/biased’**

### **Focalización y énfasis ‘Focus and emphasis’**

27. Estás hablando de María con alguien y oyes que entra una persona. Pregúntale si es María la persona que está entrando.

‘You are talking about Maria to someone and you hear someone enter. Ask if it was Maria who entered’

### **Preguntas exclamativas ‘Exclamative questions’**

28. El electricista tenía que venir a las 10. Tuviste que salir a comprar y tu hija se quedó esperándolo. Llegas de la compra y el electricista aún no ha llegado.

‘The electrician was supposed to come at 10. You had to leave to go shopping and your daughter stayed at home to wait. You arrive back home from shopping and the electrician still hasn’t come’

29. Estás cenando en un restaurante. Hace mucho calor y el ambiente está cargado. Al lado tuyo está tu hijo temblando de frío. Sorprendida le preguntas si tiene frío.

‘You’re eating in a restaurant. It’s really hot. At your side, your son is shivering. Surprised, you ask if he is cold.’

### **Preguntas confirmatorias ‘Confirmation questions’**

30. Juan dijo que iba a venir a comer pero quieres confirmarlo. ¿Qué le dices a Juan?

‘Juan said he was going to come eat, but you want to confirm. What do you say to him?’

31. Antes de ir a trabajar tu hermano dijo que no se sentía muy bien. Al volver, lo encuentras en la cama temblando de frío. Ves que no se siente bien, pero se lo preguntas, sabiendo cuál va a ser la respuesta.

‘Before going to work your brother said he didn’t feel well. Upon returning, you find him in bed shivering. You see that he doesn’t feel well, but you ask him, knowing what the answer will be.’

32. Tienes muchas ganas de que alguien venga a una cena que organizaste. Se lo pides de modo que no pueda decir que no.

‘You really want someone to come to a dinner you organized. Ask him/her in a way that they can’t say no.’

33. Sabes que afuera está haciendo mucho frío. Entra alguien bien abrigado y le preguntas si tiene frío.

‘You know that it’s really cold outside. Someone walks in all bundled up and you ask him/her if they are cold.’

### **Preguntas imperativas ‘Imperative questions’**

34. Tus nietos arman mucho ruido y no te dejan oír la televisión. Les pides que se callen. (entre ruego y orden)

‘Your grandkids are making a lot of noise and you can’t hear the TV. Ask them to be quiet.’



35. No te hacen caso y esta vez lo pides más enojada. (orden)  
 ‘They (the grandkids) don’t listen to you and this time you ask them, angrier.’
36. Le preguntas a un amigo si se quiere venir a tomar una cerveza contigo. (invitación)  
 ‘You ask a friend if they want to come to drink a beer with you.’
37. Les preguntas a tus sobrinos si quieren dulces. (invitación)  
 ‘You ask your nephews if they want candy.’
38. Organizas una fiesta en tu casa y tienes muchas ganas de que un compañero tuyo vaya. Pídele (que venga).(intención exhortativa: “me gustaría mucho que vinieras...”)  
 ‘You’re organizing a party at your house and you really want a friend to go. Ask him/her to come’
39. Necesitas subir tres pisos porque dejaste la cartera arriba. Vas con un niño chiquito y, para ganar tiempo, lo dejas abajo. Dile que no se mueva. (ruego-orden)  
 ‘You need to go upstairs because you left your wallet there. You’re with a small child and to save time, you leave him/her downstairs. Tell him/her to not move.’
40. Necesitas tranquilidad pero estás en medio de un gran ruido. Pide si alguna vez habrá tranquilidad en esta casa.  
 ‘You need it to be quiet but you’re in the middle of a lot of noise. Ask if there will ever be peace and quiet in your house’

### **3. INTERROGATIVAS PARCIALES ‘BIASED QUESTIONS’**

#### **3.1. Neutra ‘Neutral’**

<b>Oraciones de una unidad ‘Sentences with one (tonal) unit’</b>
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41. (Pregunta la hora)  
 ‘Ask what time it is.’
42. Pregúntale la hora a una persona mayor.  
 ‘Ask an elderly person for the time.’
43. Te fuiste a la fiesta de Key Biscayne. Al llegar a la playa te encuentras con tipo y le preguntas por dónde llegó.  
 ‘You went to a party on Key Biscayne. When you get there you meet up with a guy and you ask him how he got there.’

<b>Oraciones de más de una unidad ‘Sentences with more than one (tonal) unit’</b>
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44. Ves que María se está yendo. Pregúntale dónde y cuándo va a volver. (Coordinación)  
 ‘You see that Maria is leaving. Ask her where and when she’s going to return.’

45. La vecina te cuenta que vino un señor a revisar la instalación del gas y que no lo dejó entrar porque no tenía suficiente dinero en casa para pagarle. El le dijo que volvería mañana. Pregúntale qué le va a decir si vuelve. (subordinación)

‘Your neighbor tells you that a utilities employee came but she didn’t let him in because she didn’t have enough money to pay him. He told her he was going to return tomorrow. Ask her what she’s going to say to him if he returns.’

### **Elementos periféricos ‘Peripheral elements’**

46. Encuentras un paquete en tu casa y le preguntas a tu hijo, Mario, quién trajo esto. (posición final, vocativo)

‘You find a package in your house and you ask your son, Mario, who brought it.’

### **3.2. No neutra ‘Not neutral/biased’**

#### **Focalización contrastiva ‘Contrastive focus’**

#### **Énfasis y preguntas exclamativas ‘Emphasis and exclamative questions’**

47. Tu primo te cuenta que la guagua que venía de South Beach llegó con cuatro horas de retraso. Pregúntale, sorprendido, a qué hora llegó al final.

‘Your cousin tells you that the bus that comes from South Beach arrived four hours late. Ask him, surprised, at what time it finally came.’

#### **Preguntas dubitativas ‘Uncertainty questions’**

48. A las dos de la mañana llaman a la puerta. Estás dormida y te despiertan. Pregúntate quién será a estas horas.

‘At two in the morning, someone knocks at the door. You’re asleep and it wakes you up. Ask yourself who it could be at this time.’

#### **Preguntas imperativas ‘Imperative questions’**

49. Le pides a tu hijo que te haga unos arreglos en la casa y no estás seguro de que lo vaya a hacer, ya que no es la primera vez que se lo pides. Pregúntale, medio enojado, cuándo lo va a hacer. (orden)

‘You ask your son to do some chores for you and you’re not sure if he is going to do it, as it’s not the first time you’ve asked. Ask him, half upset, when he’s going to do it.’

50. Tienes ganas de que unos amigos vengan a comer a tu casa. Medio suplicando (porque ya te han dicho que no pueden venir) les preguntas por qué no vienen. (Invitación, ruego)

‘You really want some friends to come eat at your house. Half begging (because they already told you that they couldn’t come), ask them why they can’t come.’

51. Alguien te tira de la camisa un par de veces, pero cuando te das vuelta no ves a nadie. Finalmente, a la tercera vez, ves que es un conocido tuyo muy pesado y hablador que siempre que te ve no te deja ir. Pregúntale qué quiere. (choque acentual, queja leve o protesta)  
'Someone taps you on the shoulder a couple of times and when you turn around you don't see anyone. Finally, the third time, you see that it's an annoying, chatty acquaintance that is hard to get away from. Ask him what he wants.'

#### **Preguntas retóricas 'Rhetorical questions'**

52. Le habías dicho a la gente que trabaja contigo que hicieran algo, pero cuando llegas descubres que no lo hicieron porque te estaban esperando. Pregúntales qué harían sin ti.  
'You told the people you work with to do something, but when you arrive at work you see that they didn't do it because they were waiting for you (to do it). Ask them what they would do without you'

### **4. INTERROGATIVAS REITERATIVAS 'ECHO QUESTIONS'**

#### **4.1. Neutra 'Neutral'**

#### **Preguntas reiterativas absolutas 'Echo questions'**

53. Invitaste a un amigo al cine y te dijo que no puede venir. Te parece que no le entendiste bien. Le preguntas para aclararlo.  
'You invited a friend to the movies and he told you he can't come. It seems you didn't understand him. Ask him again to clarify'

54. Te dicen la hora, pero no oíste bien. Piensas que te dijeron que son las nueve. Vuelves a preguntar.  
'They tell you the time, but you didn't hear it. You think they said 9. Ask them again.'

#### **Preguntas reiterativas parciales 'Biased echo questions'**

55. Te han preguntado dónde vas, pero no estás seguro si entendiste bien la pregunta. Averigua si es eso lo que habían preguntado.  
'They asked you where you're going, but you're not sure if you hear the question. See if that's what they asked you.'

#### **Oraciones de más de una unidad tonal 'Sentences with more than one (tonal) unit'**

56. Te preguntaron dónde vas y cuándo vas a volver. Pero no sabes si entendiste bien. Pregunta si es esto lo que te dijeron.  
'They asked you where you're going and when you're going to return. But you don't know if you heard correctly. Ask if that's that they asked you.'

## La disyunción ‘Disjunction’

57. Te preguntaron por dónde llegaste, pero no estás segura si te preguntaron esto o si te preguntaron por dónde entraste. Averigua si te preguntaron una cosa o la otra.

‘They asked you how you arrived, but you’re not sure if they asked that or if they asked from where you entered. Find out if they asked one thing or the other.’

## Elementos periféricos ‘Peripheral elements’

58. Te comentan que una compañera tuya, Marina, quiere ir a bailar, y sabes que no le gusta pasar tiempo junto. No lo crees y preguntas si es Marina la que quiere ir.

‘They tell you that your friend Marina want to go dance, but you don’t that she doesn’t like to go out. You don’t believe it and you asked if it was Marina who wanted to go.’

### 4.2 No neutra ‘Not neutral/biased’

## Focalización y énfasis ‘Focus and emphasis’

59. Te dicen que un compañero tuyo, Mario, se postula para alcalde. No lo crees y lo vuelves a preguntar.

‘They tell you that your friend Mario is running for mayor. You don’t believe it and you ask again.’

## Preguntas reiterativas exclamativas ‘Exclamative echo questions’

60. Tu vecina te cuenta que fue a un restaurante a comer y pidió maduros con el pollo. Ella dice que le dieron tostones en lugar de maduros. No lo puedes creer. Pregúntale qué le dieron muy sorprendida.

‘Your neighbor tells you that she went to a restaurant and ordered *maduros* with chicken. She says that they gave her *tostones* instead of *maduros*. You can’t believe it. Ask her what they gave her, surprised.’

## 5. ORACIONES IMPERATIVAS ‘IMPERATIVE STATEMENTS’

### 5.1. ÓRDENES ‘ORDERS’

61. Trabajas en el lobby de un hotel y entra una pareja que quiere una habitación. Diles que llenen un formulario.

‘You work in the lobby of a hotel and a couple enters who wants a room. Tell them to fill out a form.’

62. Ves que están un poco distraídos y no lo completan. Díselo otra vez (con más insistencia).

‘You see that they are distracted and don’t fill it out. Ask them again (with more insistence)’

63. Estás en el parque con tu nieta, María, y se te escapa. Dile que venga, que no se aleje tanto de ti.

‘You are in the park with your granddaughter, Maria, and she gets away from you. Tell her to come back and not to go so far from you’

64. Sales del parque y se te vuelve a escapar. Dile que venga (con más insistencia).  
‘You leave the park and she gets away again. Tell her to come back (with more insistence).’

65. Ahora están en la calle, por donde pasan coches, y se te vuelve a escapar. Estás muy nerviosa y le dices, enojada, que no se separe de ti. (con mucha más insistencia)  
‘Now you guys are on the street where there’s a lot of traffic and she gets away from you again. You’re really nervous and you tell her, angry, not to separate from you (with way more insistence).’

66. Estás paseando el perro, Bobi, y se te escapa. Llámalo.  
‘You’re walking the dog, Bobi, and he gets away from you. Call him.’

## 5.2. RUEGOS ‘COMMANDS’

67. Quieres ir al cine con un tipo. Te dice que tiene trabajo, pero sabes que el trabajo lo puede hacer después. ¿Cómo le dirías para convencerlo?  
‘You want to go to the movies with a friend. He tells you he has work, but you know it can wait till later. What would you say to convince him?’

68. Parece que quiere ir pero te dice que no. Insiste a ver si lo puedes convencer.  
‘It seems like he wants to go, but he tells you no. Insist on seeing if you can convince him.’

## 6. VOCATIVOS ‘VOCATIVES’

69. Entrás en la casa de una amiga tuya, Marina, pero al entrar no la ves. Llámala.  
‘You enter your friend Marina’s house, but you don’t see her. Call for her.’

70. Pasan diez segundos y no sale nadie. Vuelve a llamarla.  
‘Ten seconds go by and no one appears. Call for her again.’

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