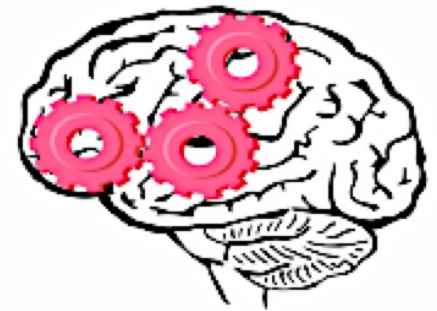
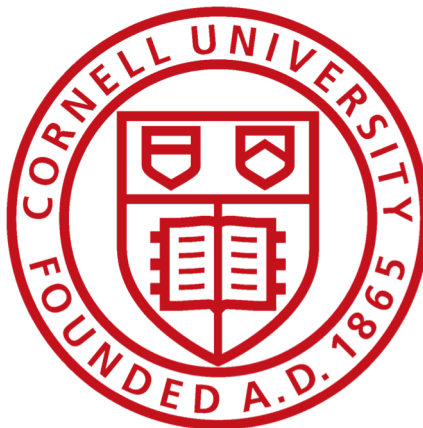
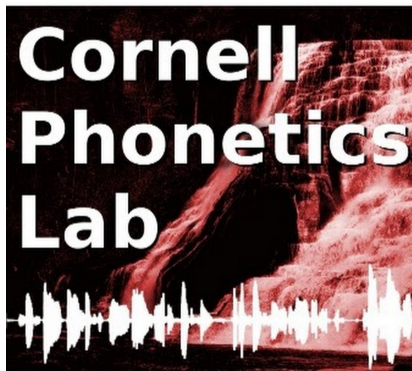


Miami English:

How contact between English and Spanish
is shaping the way Miami speaks

Naomi Enzinna
Cornell University



Cognitive Science @ Cornell

Miami's demographics are unique

65% Hispanic/Latin@ in Miami-Dade

- Higher % in some areas

72% do not speak English at home

(Carter & Callesano 2018, Enzinna 2015)

Miami's demographics are unique

Largest Latin@ group in U.S.:

Mexicans (64.5%)

Miami-Dade:

Mexicans (3%), Cubans (54%)

(Carter & Callesano 2018)

Non-English is spoken at home at all socioeconomic levels

Hialeah (working class)

median income: \$31,648, non-English: 94.2%

Doral (middle class)

median income: \$69,300, non-English: 88.8%

Key Biscayne (affluent)

median income: \$104,554, non-English: 79.9%

(Carter & Callesano 2018, Carter & Lynch 2015)

Spanish in politics, business, media

Since 1973, almost every mayor has been Hispanic/Latin@, and many Cuban-born

60.5% of business firms are Hispanic-owned

Spanish-language newspapers, TV, radio stations

(Lynch 2000, Enzinna 2015)

Spanish in popular culture

Music: Will Smith's (1998) *Miami*

Pitbull's (2009) *I Know You Want Me*

Starbucks opened a
ventanita in Coral Gables
and is serving Cuban coffee



Abuela Mami

April 9 at 8:24am · 🌐

There's a new Starbucks in an affluent South Florida town. They have a window to order like a Cuban cafe and look at what you can order. Thoughts? [Abuelamami.com](https://www.abuelamami.com)



Abuela
Mami
com

Language contact causes language change

Lexical borrowings

‘karaoke’ (Japanese)

Phonological transfer

Miami English

Pidgins/creoles

Haitian Creole

Research on language in Miami (FIU)

Carter & Callesano (2018)

Implicit perceptions of Spanish dialects in Miami and their associations

Carter & Lynch (2015)

Language in Miami and sociolinguistic issues/trends

Carter, López, & Sims (2014)

Rhythm and vowels in Miami Latino English

Cerny (2009)

phonetic analysis of Miami vowels

Has language contact in Miami influenced English spoken by English monolinguals and Spanish-English bilinguals?

Two studies:

1. Prosody (rhythm and pitch)
2. Phonetic accommodation of Voice Onset Time

Has language contact in Miami influenced English spoken by English monolinguals and Spanish-English bilinguals?

Two studies:

1. Prosody (rhythm and pitch)
2. Phonetic accommodation of Voice Onset Time

Research Questions

Does Miami English have Spanish-influenced rhythm and pitch?

How does English spoken by Miami English Monolinguals compare to English spoken by Spanish-English bilinguals and non-Miami English monolinguals?

Participants

10 in each group:

Ithaca English Monolinguals (IEM)

- Ithaca is 7% Hispanic

Miami English Monolinguals (MEM)

Early Spanish-English Bilinguals (EB)

Late Spanish-English Bilinguals (LB)

(Enzinna 2015)

Participants read 1st 8 lines of “A Rainbow Passage”

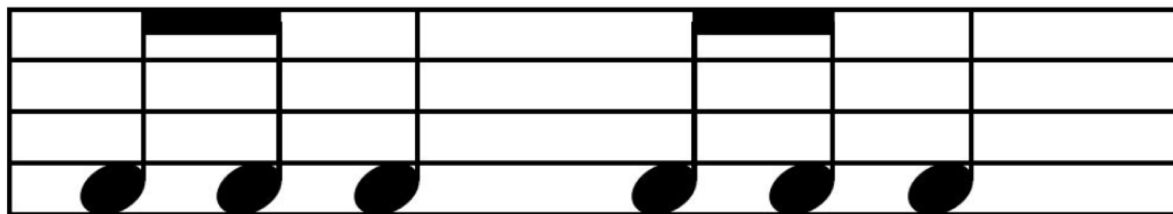
When the sunlight strikes raindrops in the air, they act as a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow. Throughout the centuries people have explained the rainbow in various ways. Some have accepted it as a miracle without physical explanation.

Rhythm

Rhythm, generally defined

An ordered alternation of contrasting elements

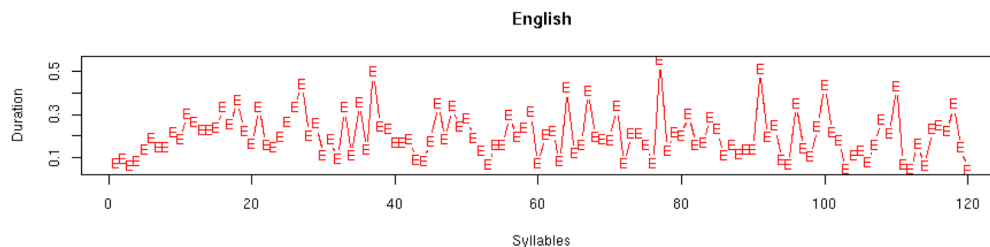
In music, placement of sounds in time



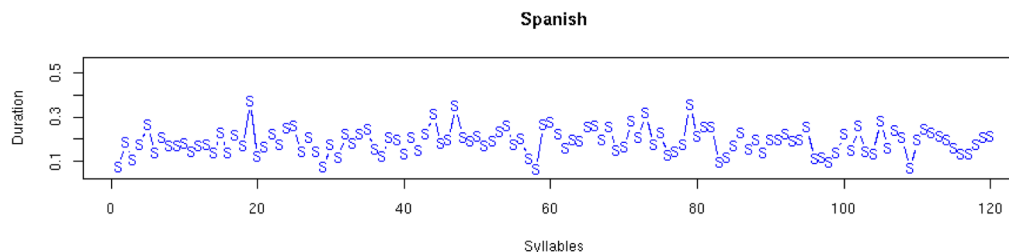
Rhythm in language

Stress-timed: stressed syllables are longer than unstressed syllables, e.g., English

More
variation
in syllable
duration



Syllable-timed: stressed/unstressed syllables are about equal in length, e.g., Spanish



(Image from Liberman 2008)

Rhythm differences are influenced by what occurs in a syllable

English: (C)(C)(C)V(C)(C)(C)(C)(C)

Variation in number of consonants:

short syllable: “a” /e/

long syllable: “strengths” /strɛŋkθs/

Variation in duration of vowels:

Stressed vowels are 50% longer than unstressed vowels

stressed vowel in 1st syllable: a.ttic

unstressed vowel in 1st syllable: a.t tack

(Nava 2010)

Rhythm differences are influenced by what occurs in a syllable

Spanish: (C)(C)V(C)(C)

Variation in number of consonants:

short syllable: **o**.jo /o/

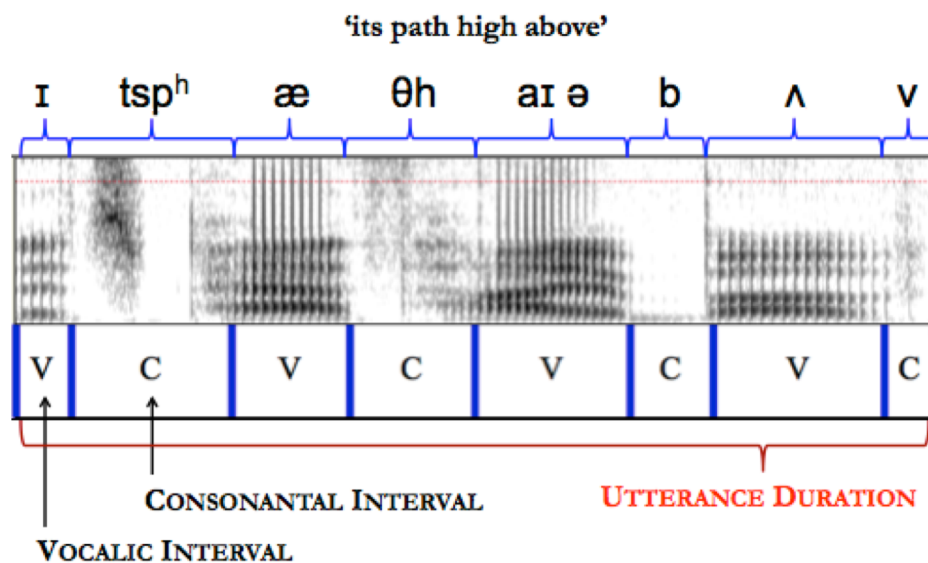
long syllable: **trans**.for.mar /trans/

Stressed vowels are only 10% longer than unstressed vowels

(Nava 2010)

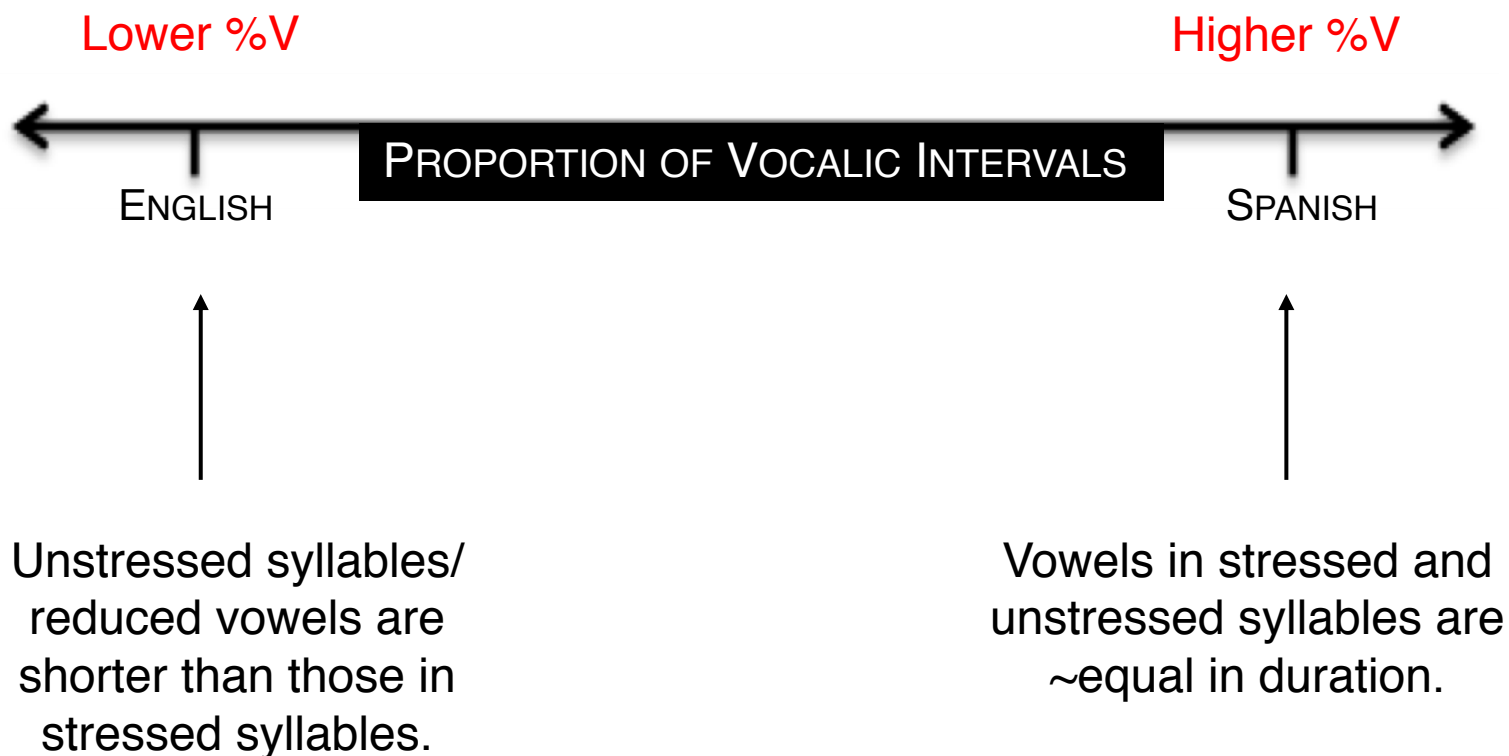
%V: Proportion of vocalic intervals

Out of a stretch of speech,
%V is how much of that speech is a vowel



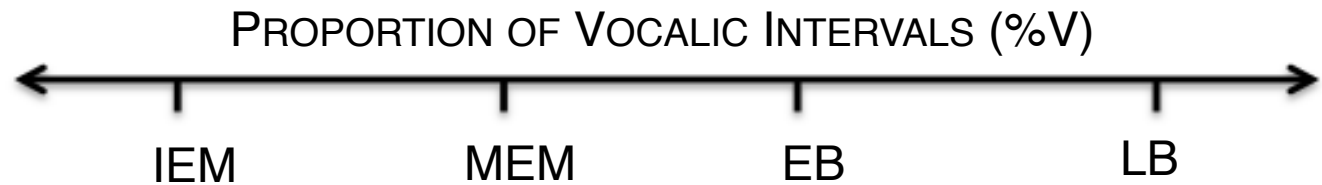
(Ramus et al. 1999)

%V: Proportion of vocalic intervals

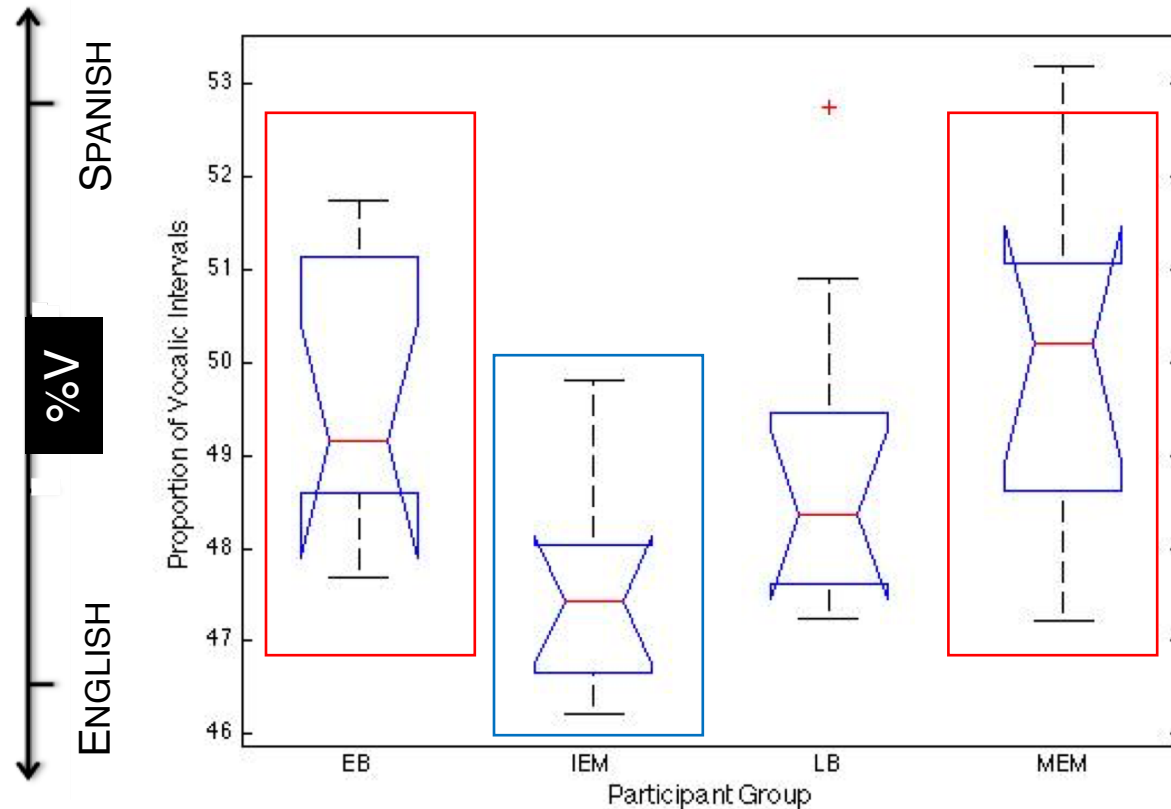


Hypothesis

Miami English will have more Spanish-like rhythm (higher %V) than non-Miami English

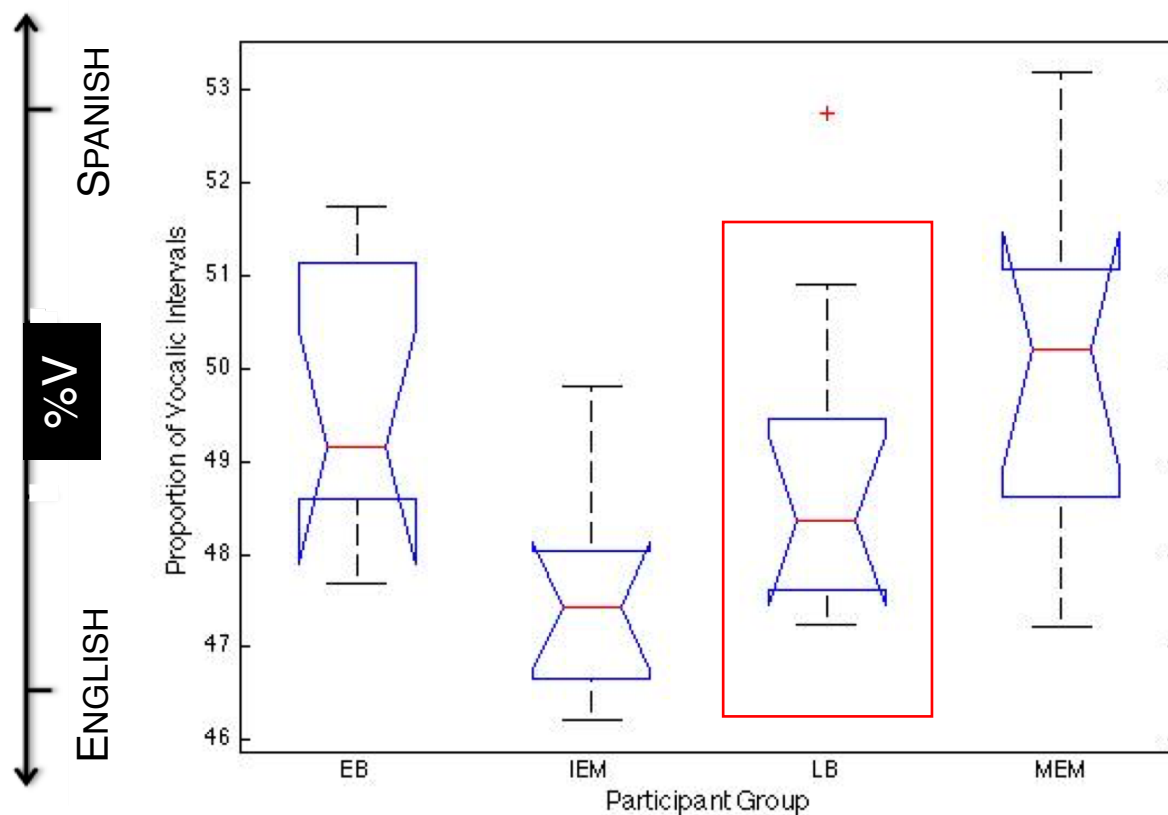


MEMs and **EBs** had more Spanish-like rhythm
(higher %V) than **IEMs**



1-way ANOVA: $F(3, 35) = 4.06$, $MSE = 2.41479$, $p < .0142$

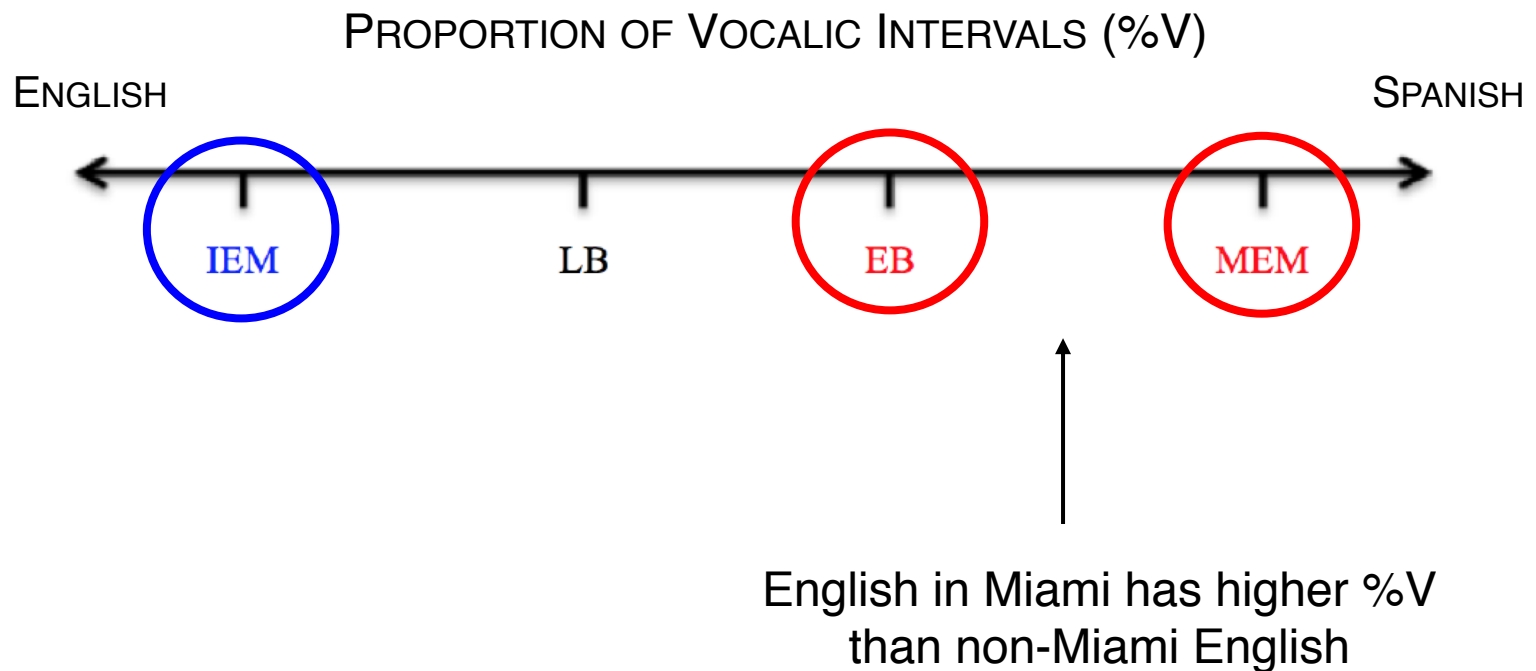
%V for **LBs** did not differ from any group



1-way ANOVA: $F(3, 35) = 4.06$, $MSE = 2.41479$, $p < .0142$

Take-away:

Miami English has Spanish-influenced rhythm

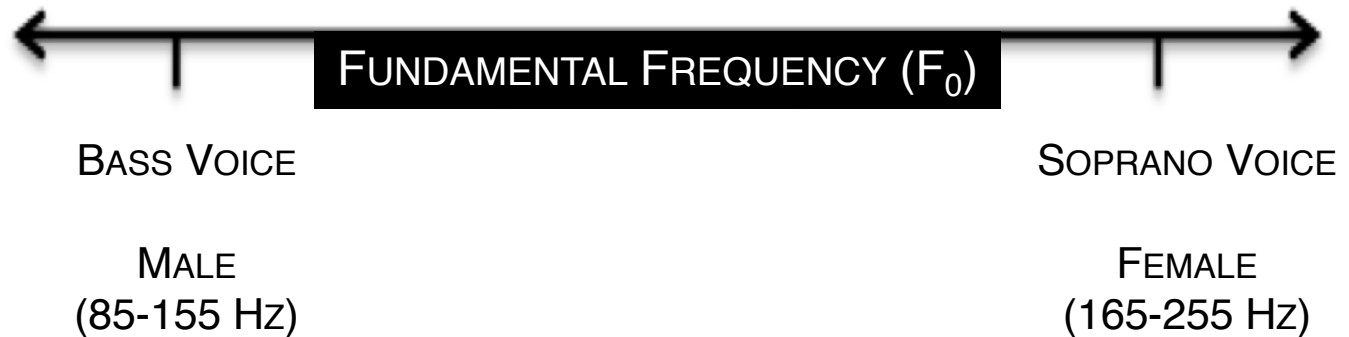


Pitch

Pitch is measured with fundamental frequency (F_0)

F_0 is a measure of:

- Frequency of vocal fold vibrations
- How high/low a person's voice sounds



Pitch range and variation

Pitch range:



Pitch variation:



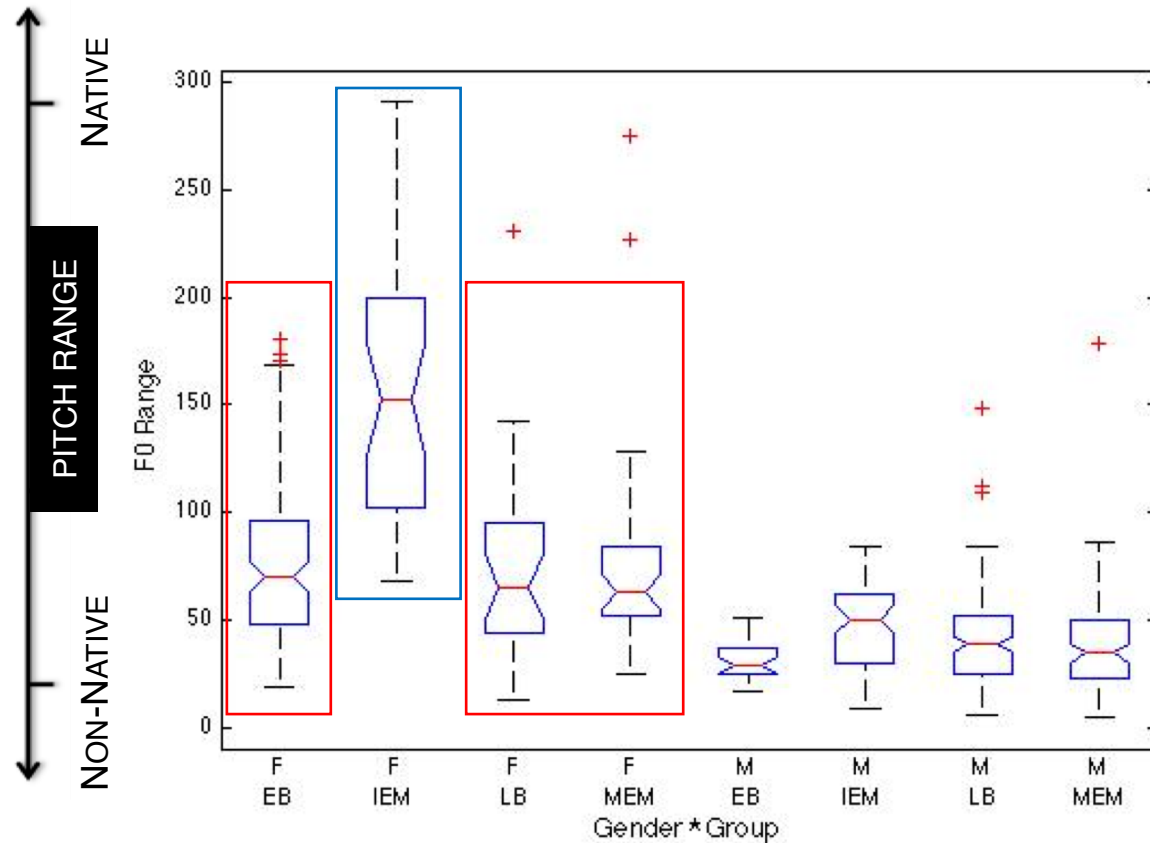
Carries over
into second
language

Hypotheses

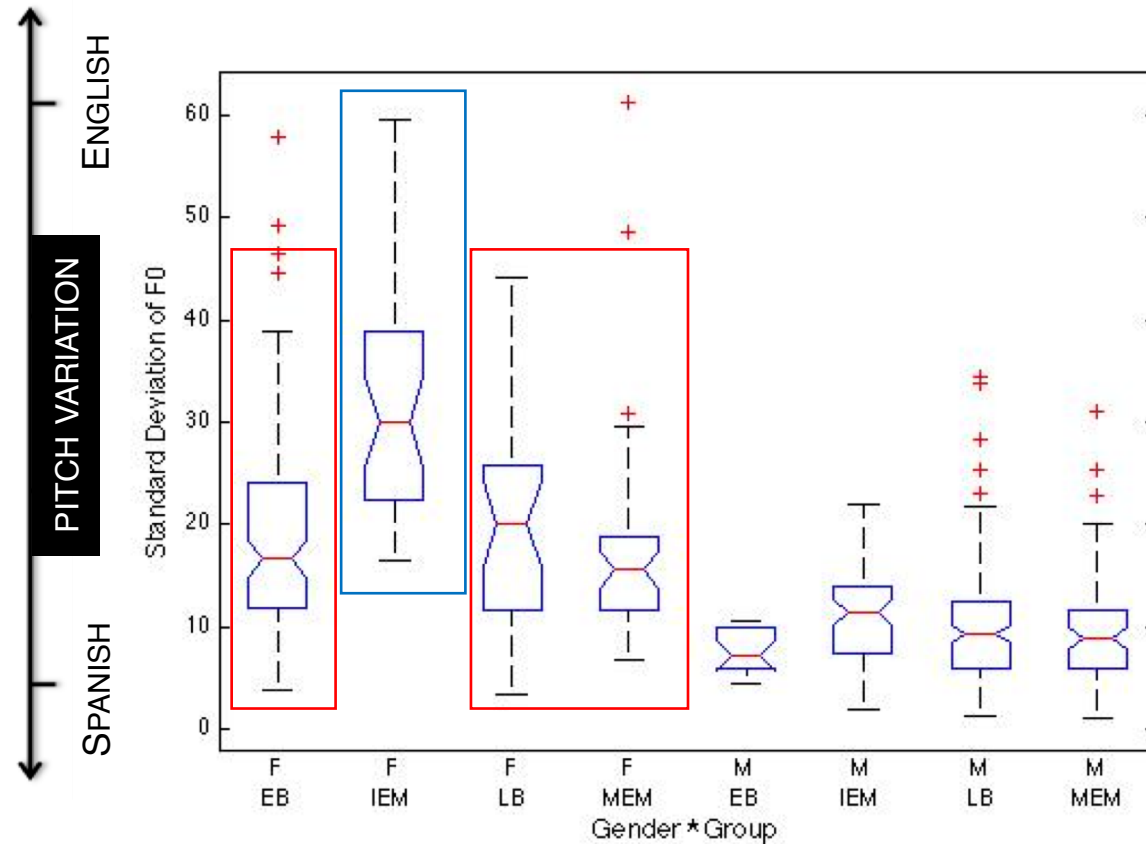
Miami English will have a more non-native/Spanish-like pitch than non-Miami English



Pitch range was lower (more non-native) for female MEMs, EBs, and LBs than female IEMs



Pitch variation was lower (more Spanish-like) for female **MEMs**, **EBs**, and **LBs** than female **IEMs**



Take-away:

Miami English has Spanish/non-native-influenced pitch



Conclusions:

Miami English has Spanish-influenced prosody

Rhythm: Spanish-like %V

Pitch: Spanish-like pitch range and variation

Spoken by Miami-English monolinguals & Spanish-English bilinguals

Has language contact in Miami influenced English spoken by English monolinguals and Spanish-English bilinguals?

Two studies:

1. Prosody (rhythm and pitch)
2. Phonetic accommodation of Voice Onset Time

Accommodation, defined

Speakers adjust their speech in order to increase or decrease social distance from a group

Research Questions

How do speakers vary their speech when speaking to an English monolingual or Spanish-English bilingual, depending on

(1) their language background?

(2) their long-term exposure to monolingual or bilingual speech in their speech community?

Participants

5 participants (ages 18-35) in each group:

- **M-Ith**: English Monolinguals from Ithaca
- **M-Mia**: English Monolinguals from Miami
- **B-Ith**: Spanish-English Bilinguals from Ithaca
- **B-Mia**: Spanish-English Bilinguals from Miami

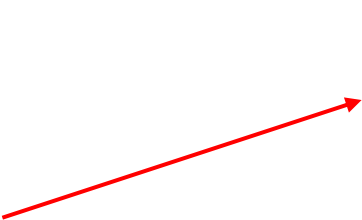
Referential communication task

Speaker (over headset):

“What is by the word **MOUSE**?”

Participant:

“**PIBBY** is by the word **MOUSE**.”



pibby					
mouse					
		muddy			
grail	tobu	fuddy	mouth	coafey	
chail	tofu				
	joy	satty			

Board completed with 2 Speakers:

- (1) English monolingual
- (2) Spanish-English bilingual

36 boards per Speaker

Voiceless stops (p, t, k) in English and Spanish

English:

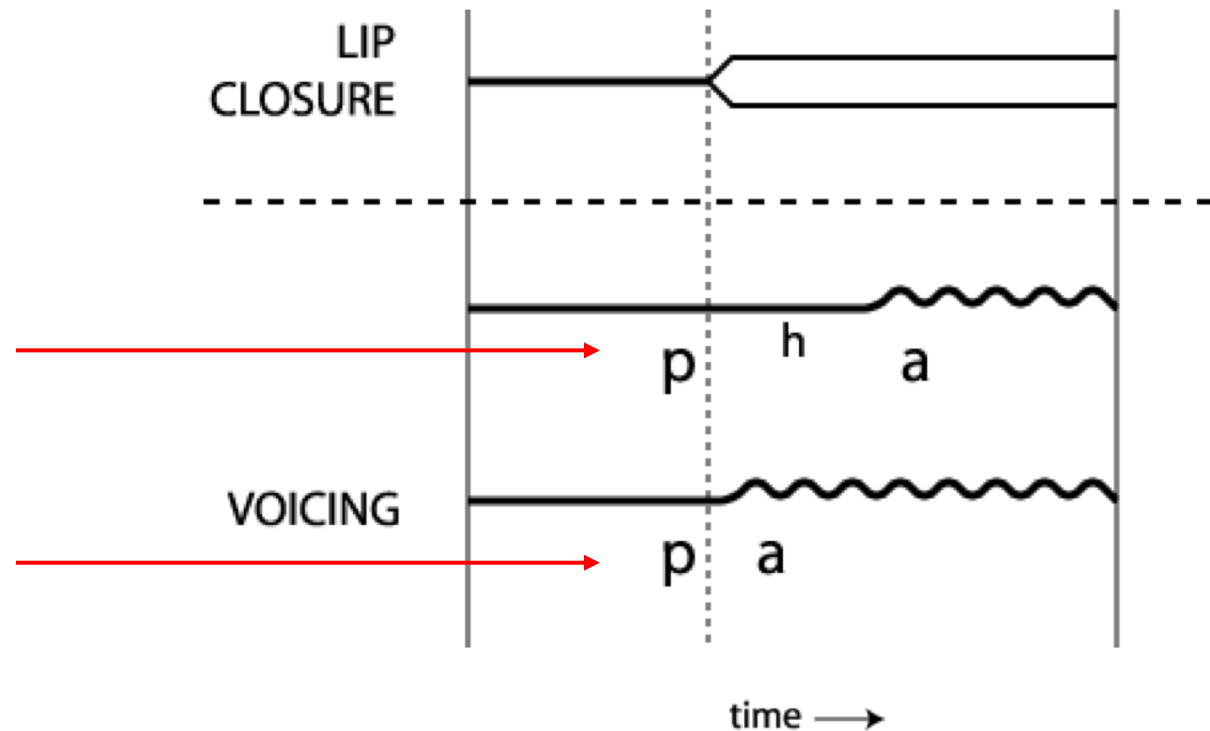
aspirated stops

“pa” - [p^ha]

Spanish:

unaspirated stops

“pa” - [pa]



(Image from Gasser 2006)

Voice Onset Time (VOT) in English and Spanish

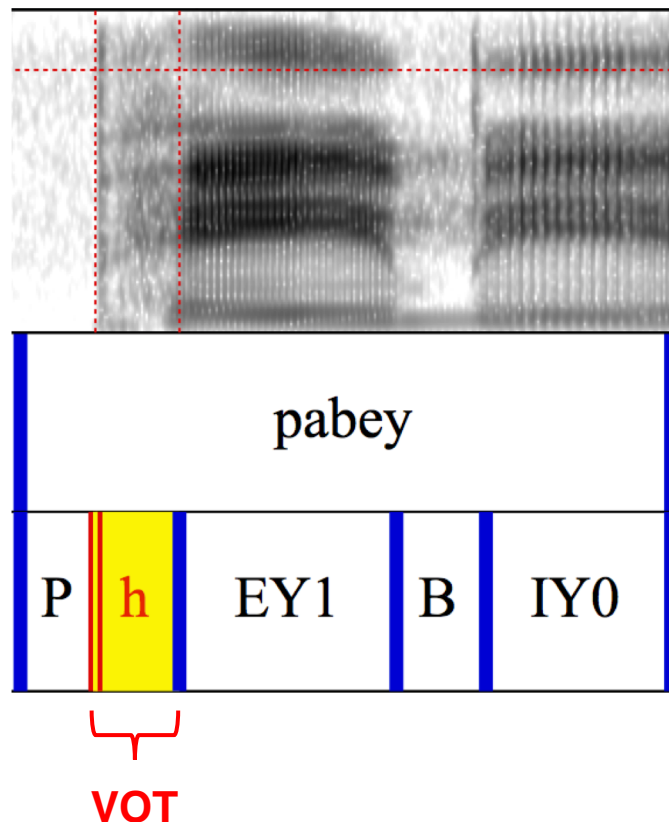


duration of time between release of voiceless stop and start of vowel

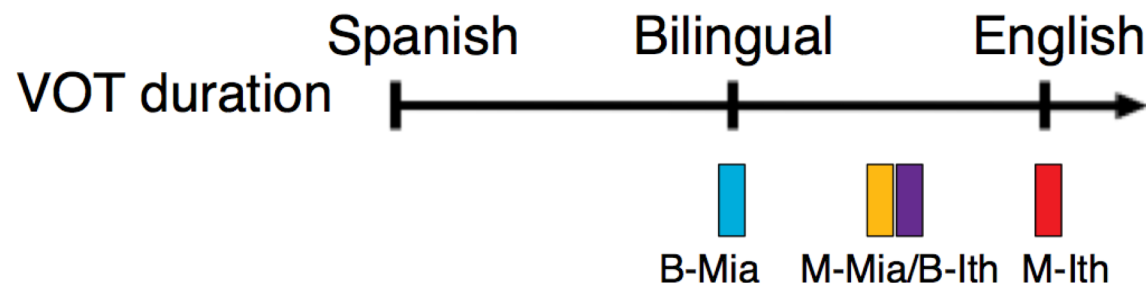
English: long lag VOT
(~60-120 ms)

Spanish: short lag VOT
(~0-30 ms)

(Yavaş & Byers 2014)

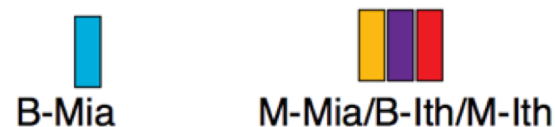


Hypotheses



Accommodation:

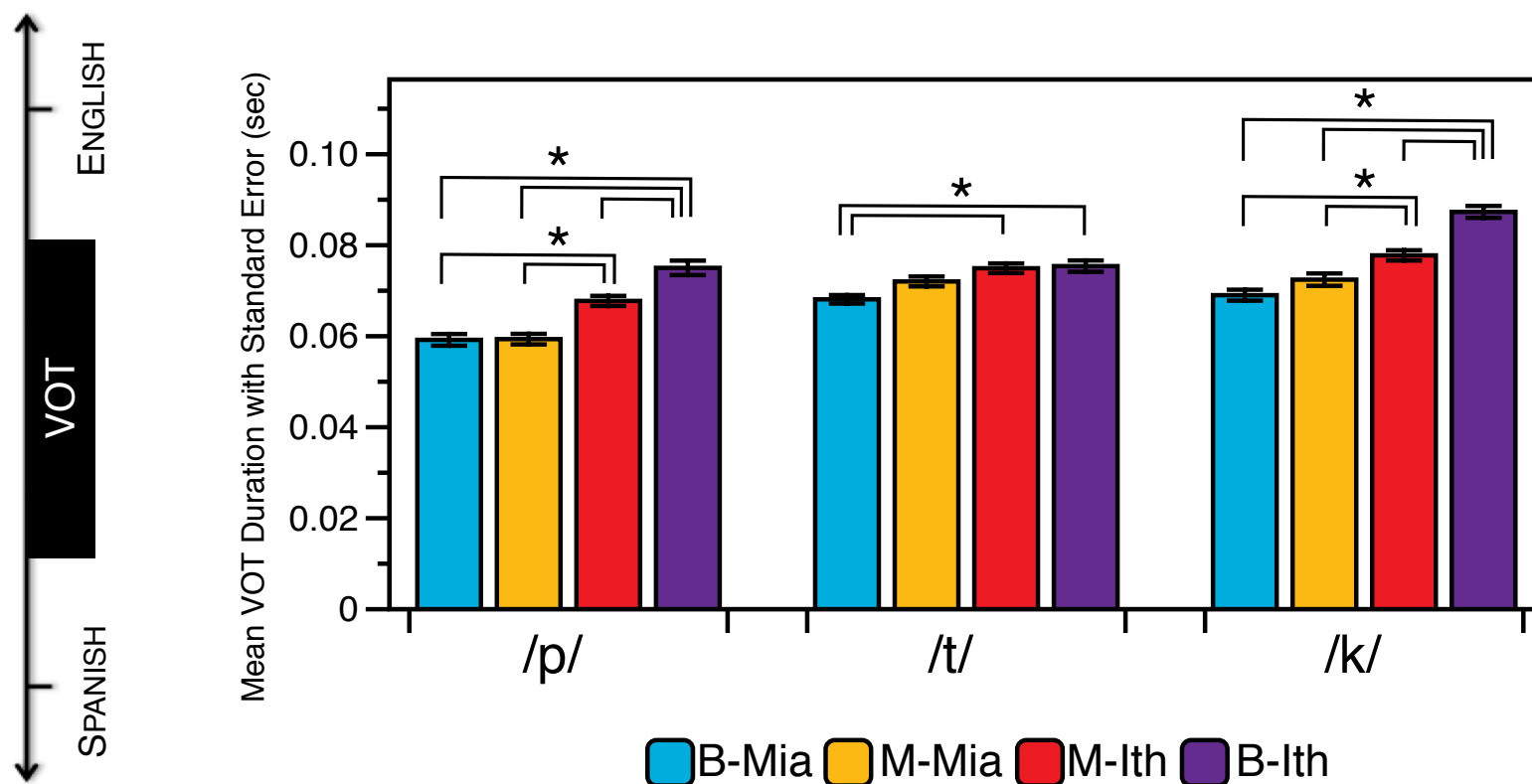
(2) VOT with Monolingual Speaker:



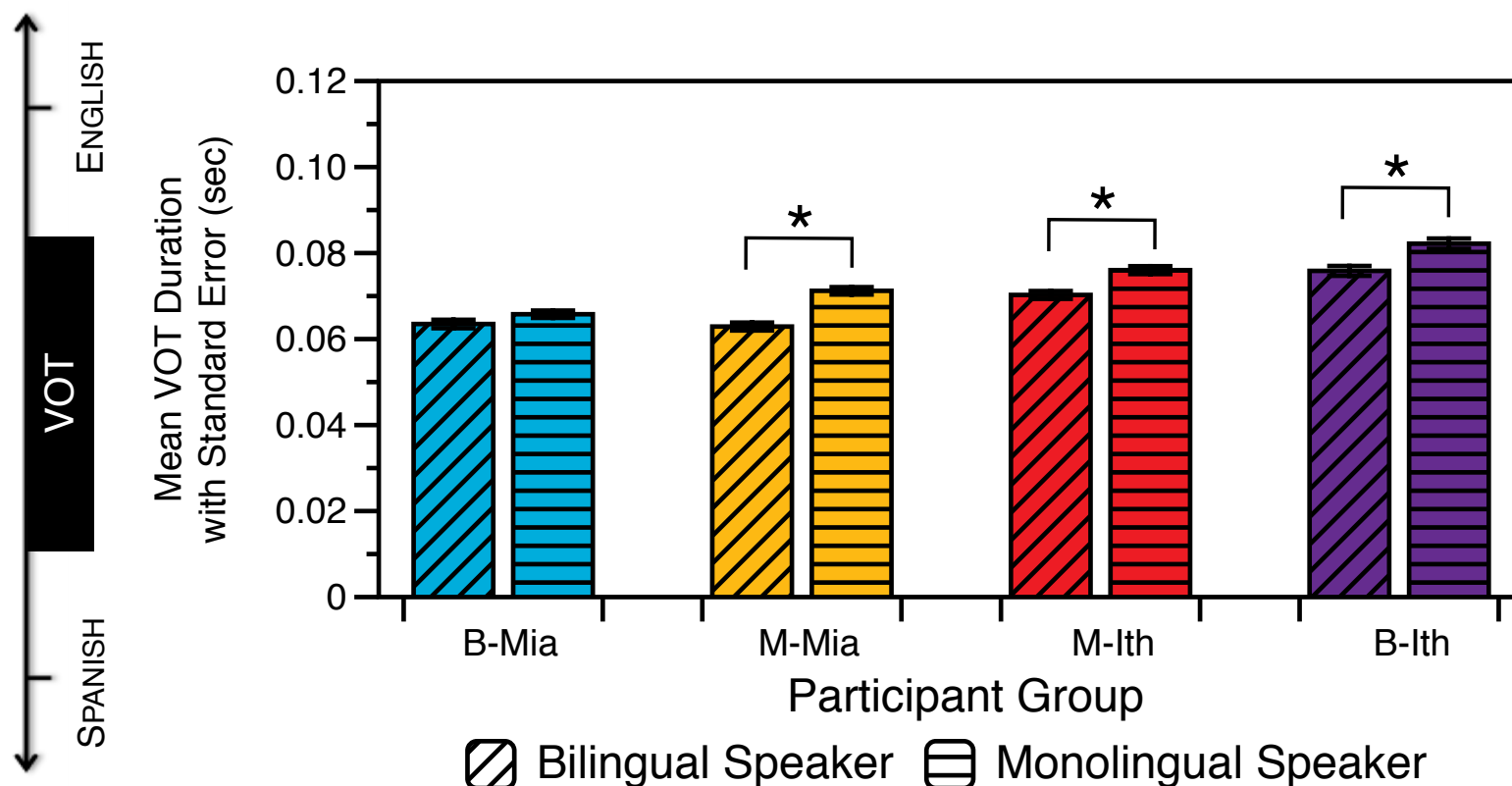
(3) VOT with Bilingual Speaker:



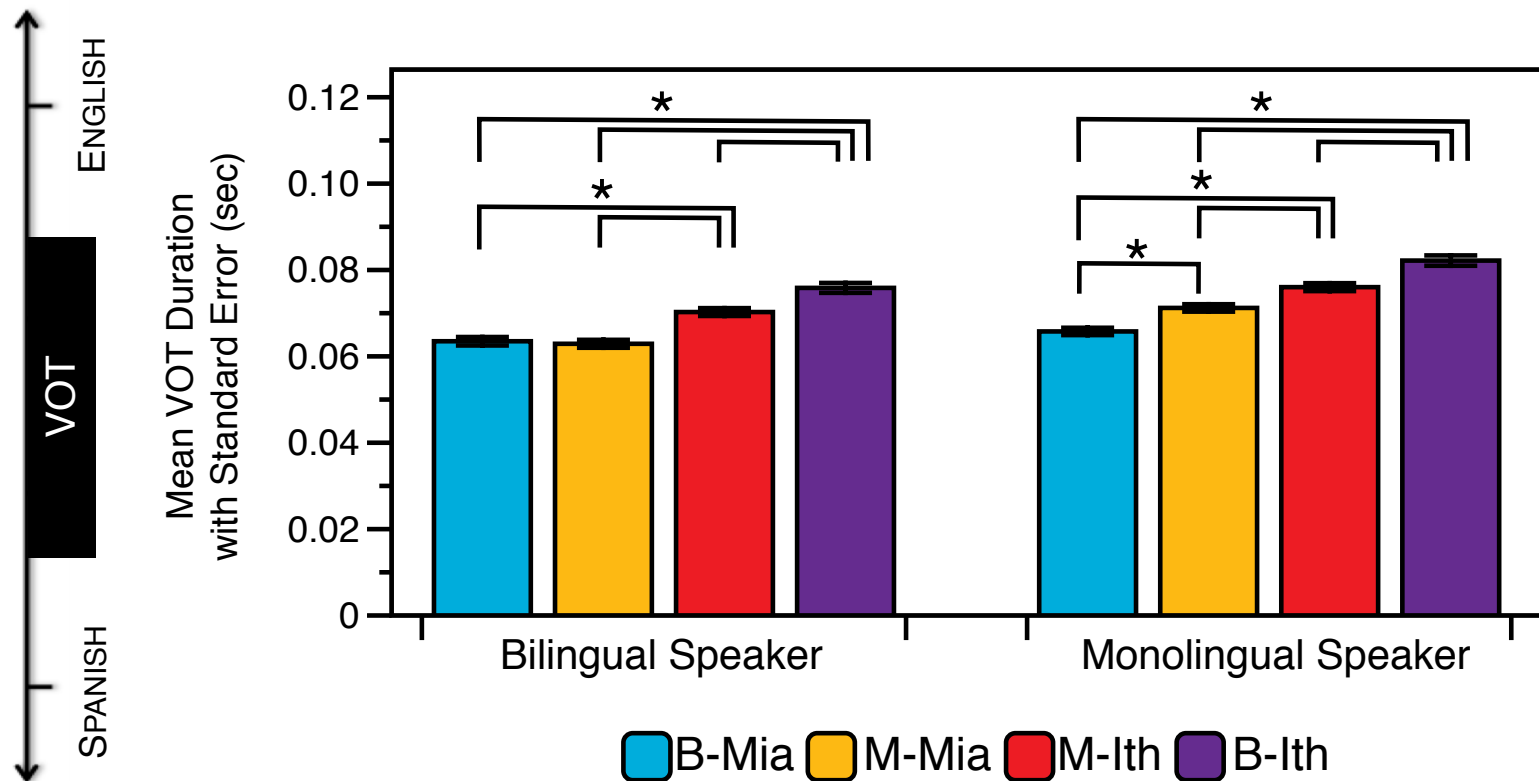
Miami groups (B-Mia, M-Mia) had overall more Spanish-like VOTs than Ithaca groups (B-Ith, M-Ith)



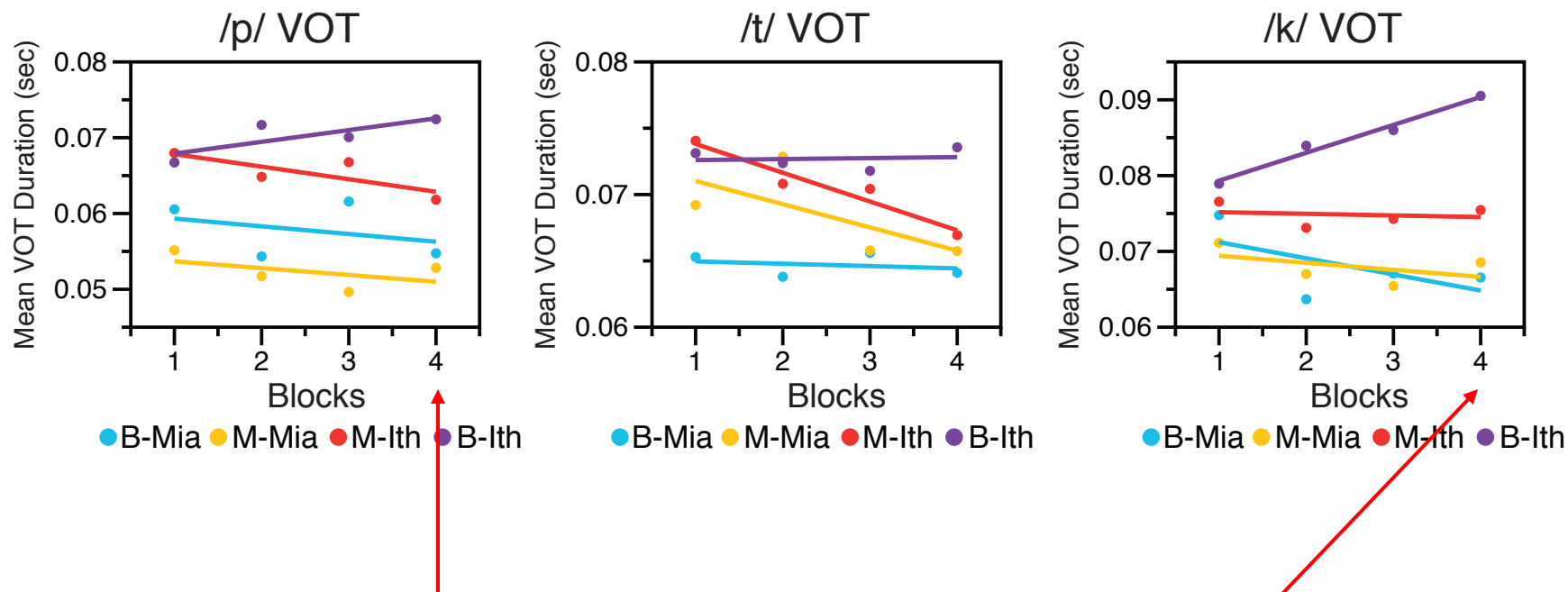
Bilinguals from Miami (**B-Mia**) did not have longer VOTs when speaking with the Monolingual Speaker



With the Bilingual Speaker, Miami Monolinguals (M-Mia) had shorter VOTs, like the Miami Bilinguals (B-Mia)

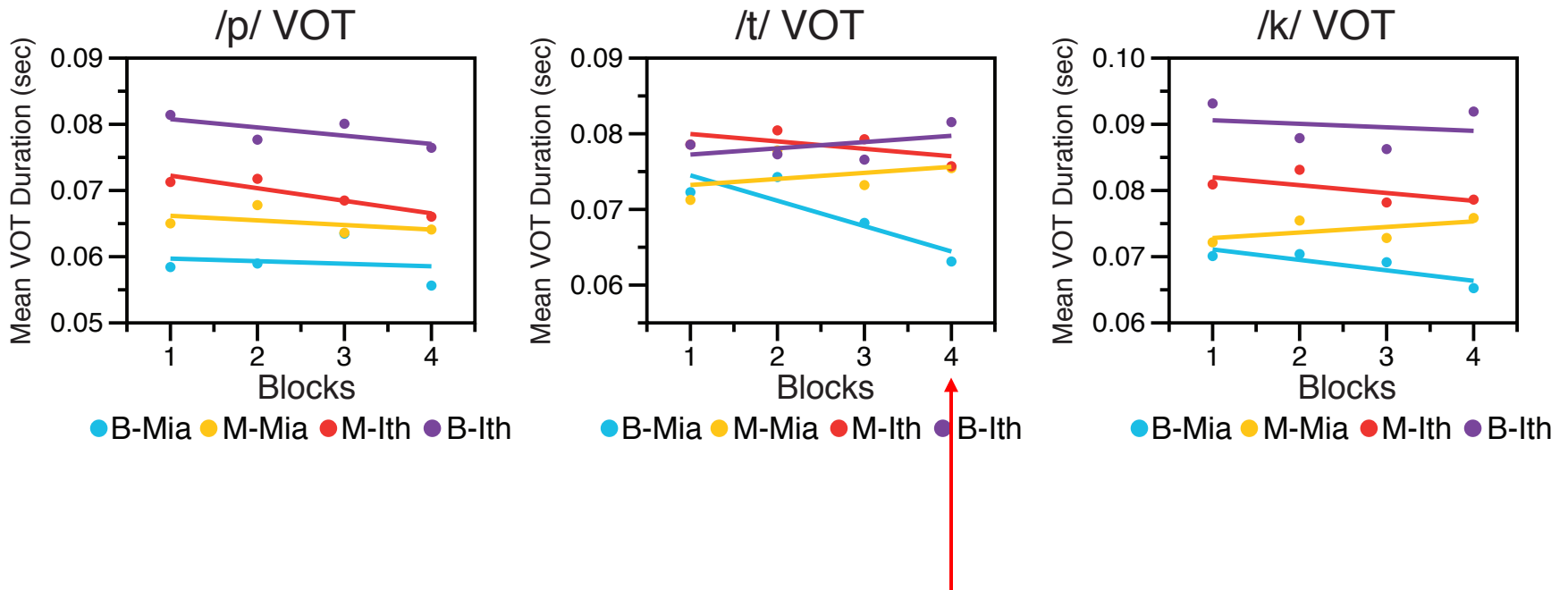


With Bilingual Speaker, Ithaca Bilinguals (B-Ith) made their VOT more English-like



By 4th block, Ithaca bilinguals had longer VOT than other groups

With Monolingual Speaker, Miami Bilinguals (B-Mia) made their VOT more Spanish-like



By 4th block, Miami bilinguals had shorter VOT than other groups

Take-away:

Language background and long-term exposure influence accommodation of VOT

Influenced by Spanish, Miami speakers have shorter VOTs than Ithaca speakers

Bilinguals diverge from speakers who are not majority in community

Has language contact in Miami influenced English spoken by English monolinguals and Spanish-English bilinguals?

Two studies:

1. Prosody (rhythm and pitch)
2. Phonetic accommodation of Voice Onset Time

Miami English, spoken by English monolinguals and Spanish-English bilinguals, **has Spanish-influenced speech characteristics**

1. Rhythm (higher %V)
2. Pitch (lower pitch range and variation)
3. Shorter VOT
4. More accommodation toward Spanish-English bilingual speech/less toward English monolingual speech

U.S. is becoming more diverse, like Miami

“By 2044, more than half of all Americans are projected to belong to a minority group (any group other than non-Hispanic White alone)”

“By 2060, nearly one in five of the nation’s total population is projected to be foreign born”

(Colby & Ortman 2015: 1)

U.S. is becoming more diverse, like Miami

We may see more language change!

“By 2044, more than half of all Americans are projected to belong to a minority group (any group other than non-Hispanic White alone)”

“By 2060, nearly one in five of the nation’s total population is projected to be foreign born”

(Colby & Ortman 2015: 1)

Or, we may see less Spanish-influenced English in Miami and the U.S.

2nd and 3rd generations are using less Spanish

Despite financial/political success of Cubans in Miami, Miamians perceive Cuban Spanish as belonging to someone with lower-income job/less education.

(Carter & Callesano 2018)

Miami is unique. Let's keep it that way!

Support dual-language curriculums in Miami-Dade Public Schools and the use of Spanish in other Miami-Dade institutions

Teach Spanish or other non-English languages to children

Celebrate and study the uniqueness of (language in) Miami whenever you can

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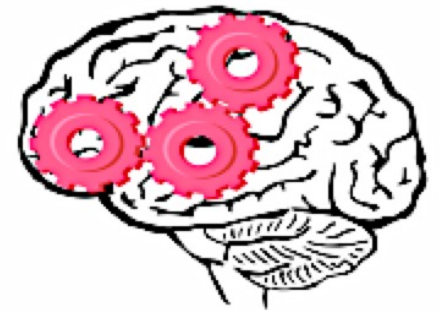
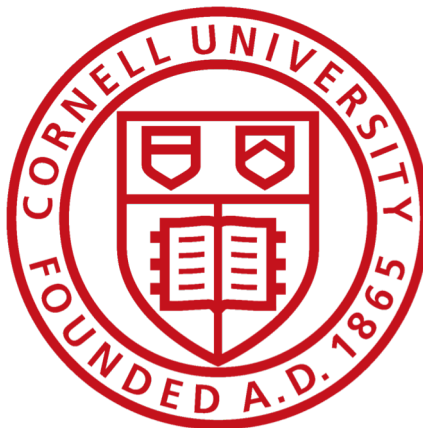
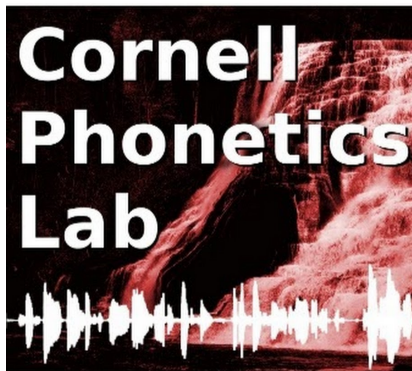
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