



## Research Focus

**Phonetic accommodation:** speakers adjust phonetic features of their speech in order to increase or decrease social distance from a group

This study focuses on accommodation of **Voice Onset Time (VOT)** of voiceless stops, which differs in

- **English:** long lag (~60-120 ms)
- **Spanish:** short lag (~0-30 ms)

Is phonetic accommodation of VOT influenced by

- 1. linguistic background (monolingual or bilingual)?**
  - English monolinguals
  - Spanish English bilinguals
- 2. long-term exposure to monolingual or bilingual speech in speech community?**
  - Monolingual community: Ithaca, NY (7% Hispanic)
  - Bilingual community: Miami, FL (68% Hispanic)
- 3. short-term exposure to monolingual or bilingual speech?**
  - immediate exposure (primed vs. unprimed word-pairs)
  - exposure throughout conversation

## Methods

### Participants

10 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

- On laptop screen, participant sees a board consisting of word-pairs.
- Over headset, participant is asked about word-pairs by a pre-recorded **English Monolingual Talker (M-Talker)** or **Spanish-English Bilingual Talker (B-Talker)**.
- There are 36 boards and 216 word pairs per recorded Talker.
- Boards occur in 4 blocks (9 boards per block).

**PRIMED WORD PAIR:** both words have aspirated stop

phby				
mooc				
grail	tofu	muddy	mouth	couley
chall	tofu			
py	tehy			

**UNPRIMED WORD PAIR:** only one word has aspirated stop

**EXAMPLE TRIAL**

Voice: "What is by the word TOFU?"

Participant: "TOFU is by the word TOFU."

## Main Findings

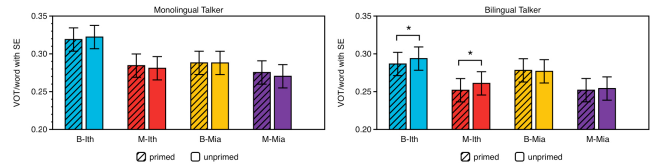
- Immediate short-term exposure (primed word-pairs) influenced speakers with less exposure to that Talker in speech community.
- Speakers with long-term exposure to monolingual/bilingual speech in speech community, who are not the majority linguistic background in community (B-Ith, M-Mia):
  - a) converged with Talker who represents majority in community
  - b) diverged from Talker who represents own linguistic background
- Whether bilinguals accommodated to both Talkers depended on which Talker they heard first.

## Results

### (1) Priming & VOT\* accommodation

\* VOT is normalized for speech rate by dividing VOT by duration of "word"

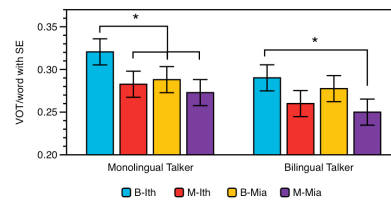
With B-Talker, monolinguals and bilinguals from the monolingual community (M-Ith, B-Ith) had shorter VOTs with primed word pairs than unprimed.



### (2a) Mean VOTs with each Talker

With M-Talker, bilinguals from the monolingual community (B-Ith) had longer VOTs than all other groups.

With B-Talker, monolinguals from the bilingual community (M-Mia) had shorter VOTs than B-Ith.



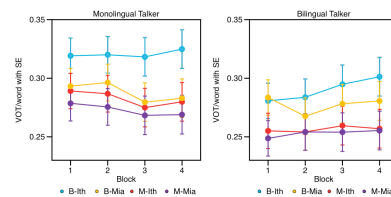
### (2b) VOT accommodation over blocks with each Talker

Long-term exposure to speech in community led to divergence:

- With B-Talker, B-Ith increased VOT.
- With M-Talker, M-Mia slightly decreased VOT.

All groups accommodated to each Talker for at least some blocks:

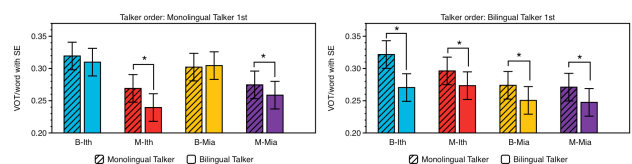
- B-Ith, M-Ith, & M-Mia had different VOTs for each Talker for all 4 blocks
- B-Mia only converged during second block.



### (3) Talker Order & VOT accommodation

Bilinguals were affected by which Talker they heard first.

- Bilinguals who heard M-Talker first did not converge with B-Talker.
- Bilinguals who heard B-Talker first had shorter VOTs with B-Talker than those who heard M-Talker first.



A copy of this poster is available at [conf.ling.cornell.edu/nenzinna](http://conf.ling.cornell.edu/nenzinna).