

# REAL TIME VOWEL SHIFTS IN GEORGIA ENGLISH

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Joey Stanley

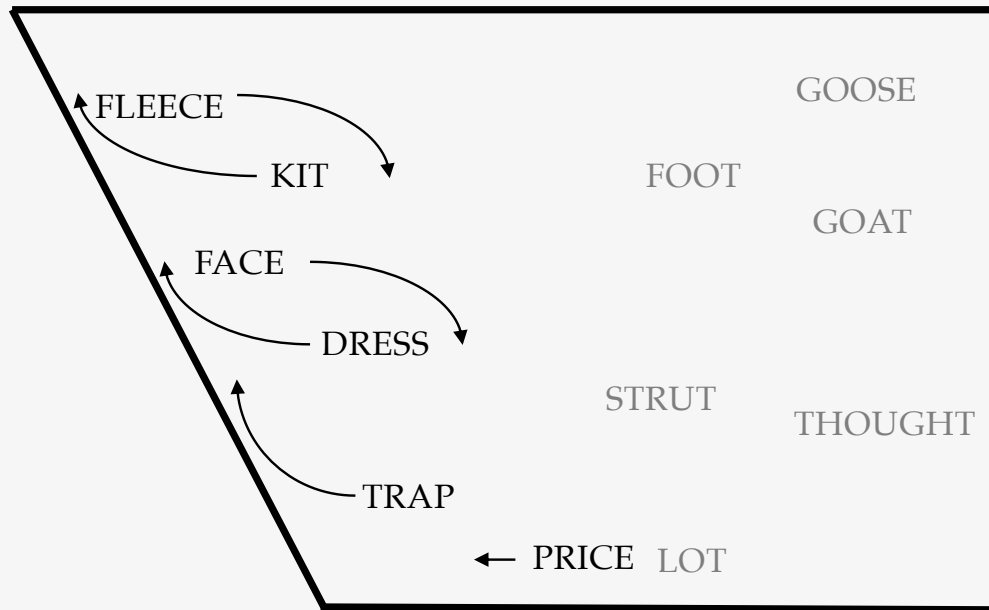
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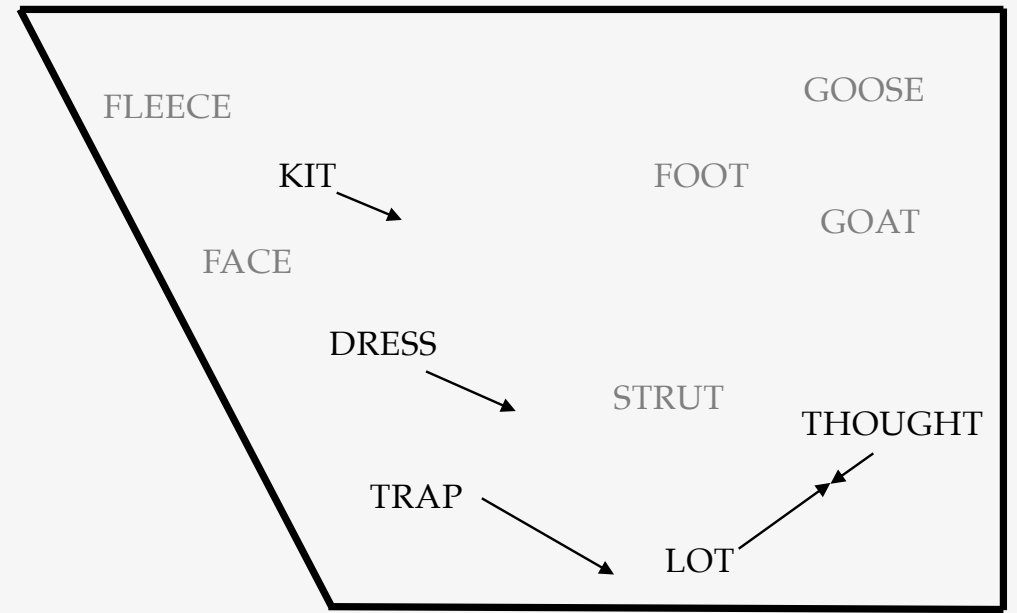
LCUGA6  
October 4, 2019  
University of Georgia  
Athens, GA

# TWO AME VOWEL SHIFTS



## Southern Vowel Shift (SVS)

Labov, Yeager, & Steiner (1972), Labov (1994), Labov, Ash, & Boberg (2006), Feagin (1986)



~~California Vowel Shift~~

~~Canadian Vowel Shift~~

## Elsewhere Shift

Hinton et al (1987), Eckert (2008)

Clarke et al. (1995)

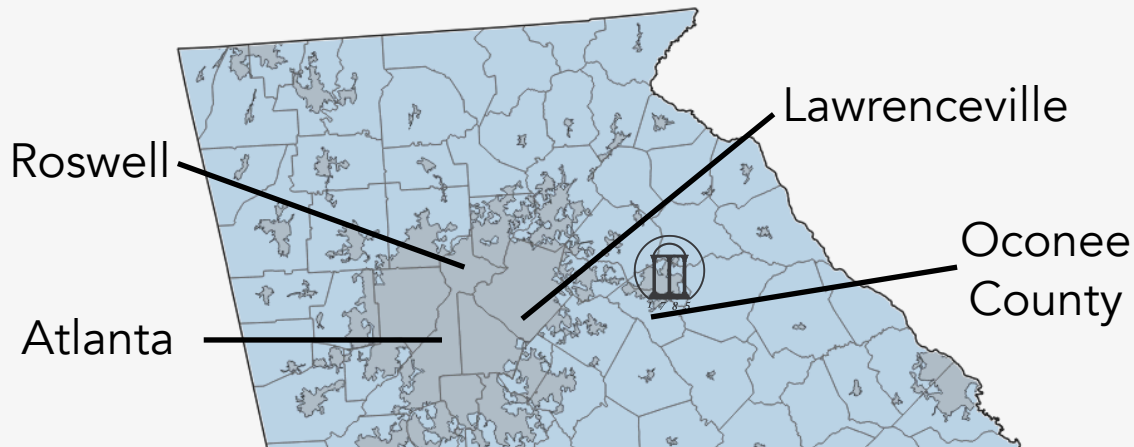
# GEORGIA ENGLISH

## African Americans, Roswell (Andres & Votta 2009)

- Younger speakers swap FACE and DRESS
- Some LOT/THOUGHT merger

## Korean Americans, Lawrenceville (Kim 2018)

- Little evidence of Southern Vowel Shift



## Caucasian Americans

### *In Atlanta* (Prichard 2010)

- Less PRICE-monophthongization
- swap FACE and DRESS but not FLEECE and KIT (cf. Andres & Votta 2009)

### *In Oconee County* (Dekker 2018)

- Grocery stores that sold sushi had less PRICE-monophthongization than those that played country music!

# THIS STUDY

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How has Georgia English changed since the 1890s?

All vowels have changed.

What is the trajectory of that change?

In the direction of the Elsewhere Shift.

# DATA & METHODS

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# DATA: LEGACY SPEAKERS

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DASS (Kretzschmar et al 2013)

- Subset of the *Linguistic Atlas of the Gulf States* (911 interviews)
- *Digital Archive of Southern Speech*: a 64-speaker subset
- See other work for variation within this corpus (Olsen, Olsen, & Renwick 2017, Stanley & Renwick 2020, Renwick & Stanley forthcoming, Bigott & Renwick this conference, Jones & Renwick this conference)

This study

- 5 “non-Black” Georgians (3 female; born 1887–1903)
- 24 hours of interviews
- 35,357 tokens

Processing

- Transcribed manually (Olsen et al 2017)
- Used the Montreal Forced Aligner (McAuliffe et al 2017) for forced-alignment and FAVE-Extract (Rosenfelder et al 2014) for formant extraction.

# DATA: CONTEMPORARY SPEAKERS

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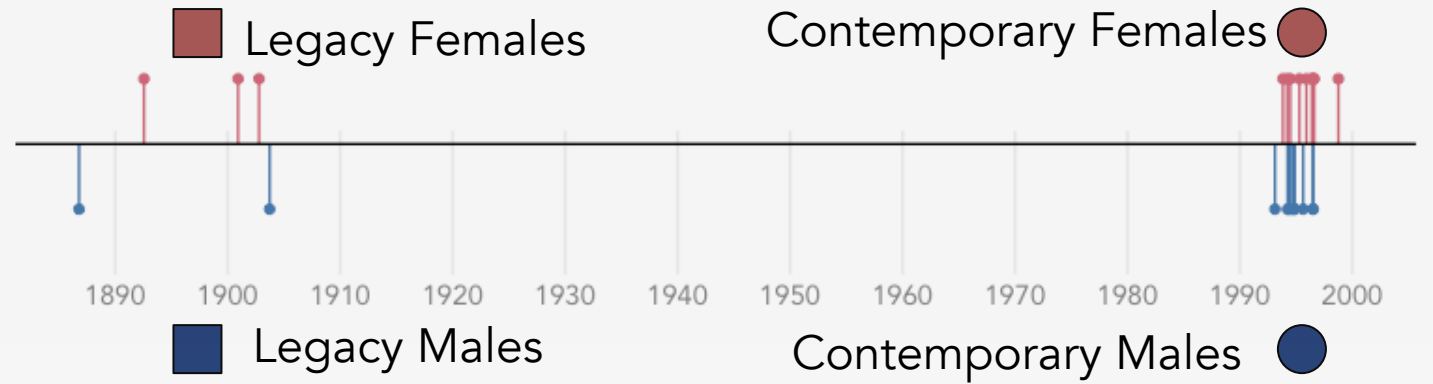
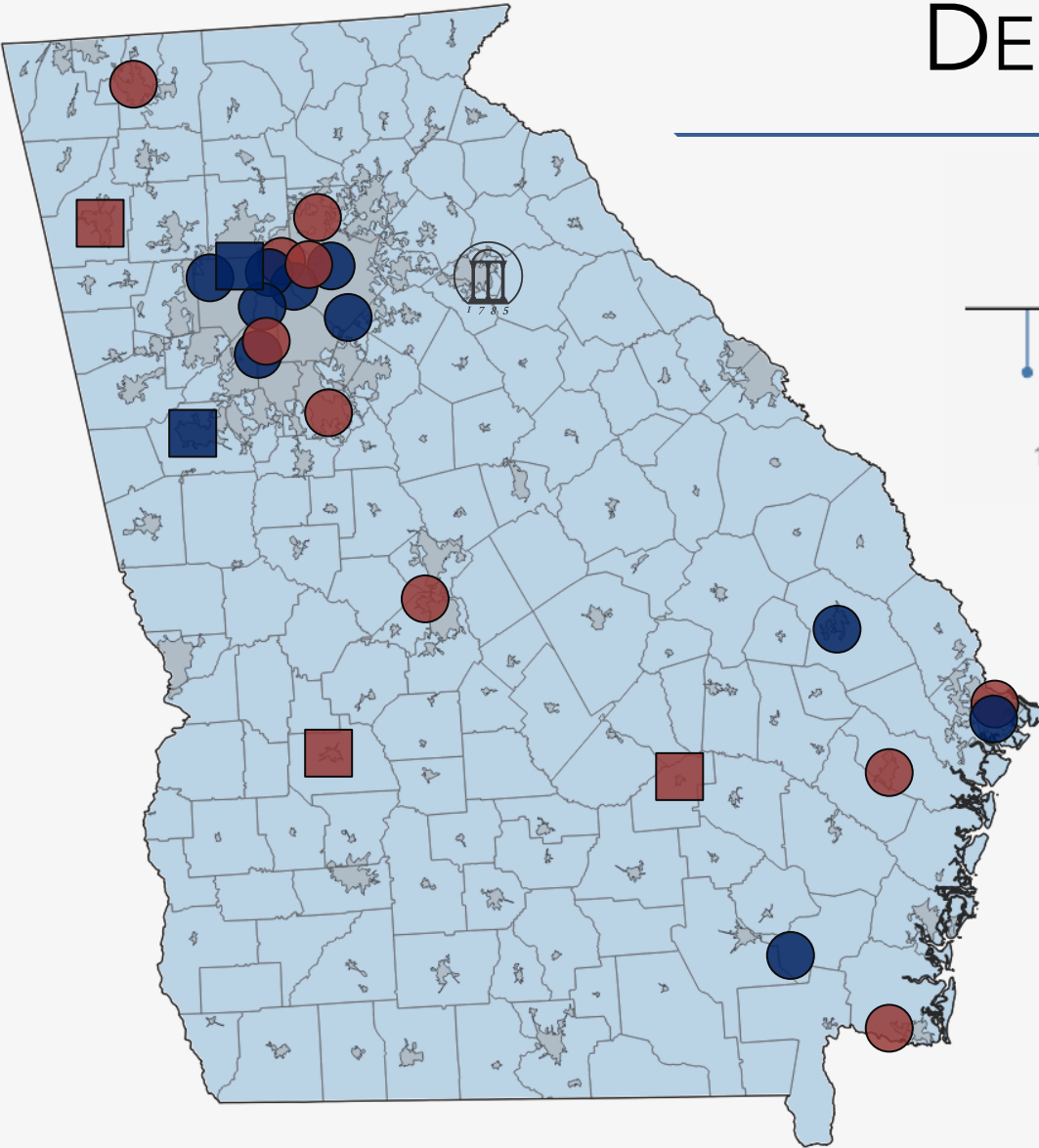
## Lab recordings

- 20 UGA undergraduate students (10 female, born 1994–1998)
- Read 300 sentences from COCA.
- ~30 minutes each, 12.5 hours total
- Recorded in 2017
- 24,325 tokens

## Used DARLA's fully automated processing (Reddy & Stanford 2015)

- automatic transcription
- forced alignment with Prosody-Lab (Gorman et al 2011)
- formant extraction with FAVE-Extract (Rosenfelder et al 2014)

# DEMOGRAPHICS



## Ethnicity

- African Americans excluded due to lack of data.
- "Non-Black" contemporary speakers retained for consistency with DASS data



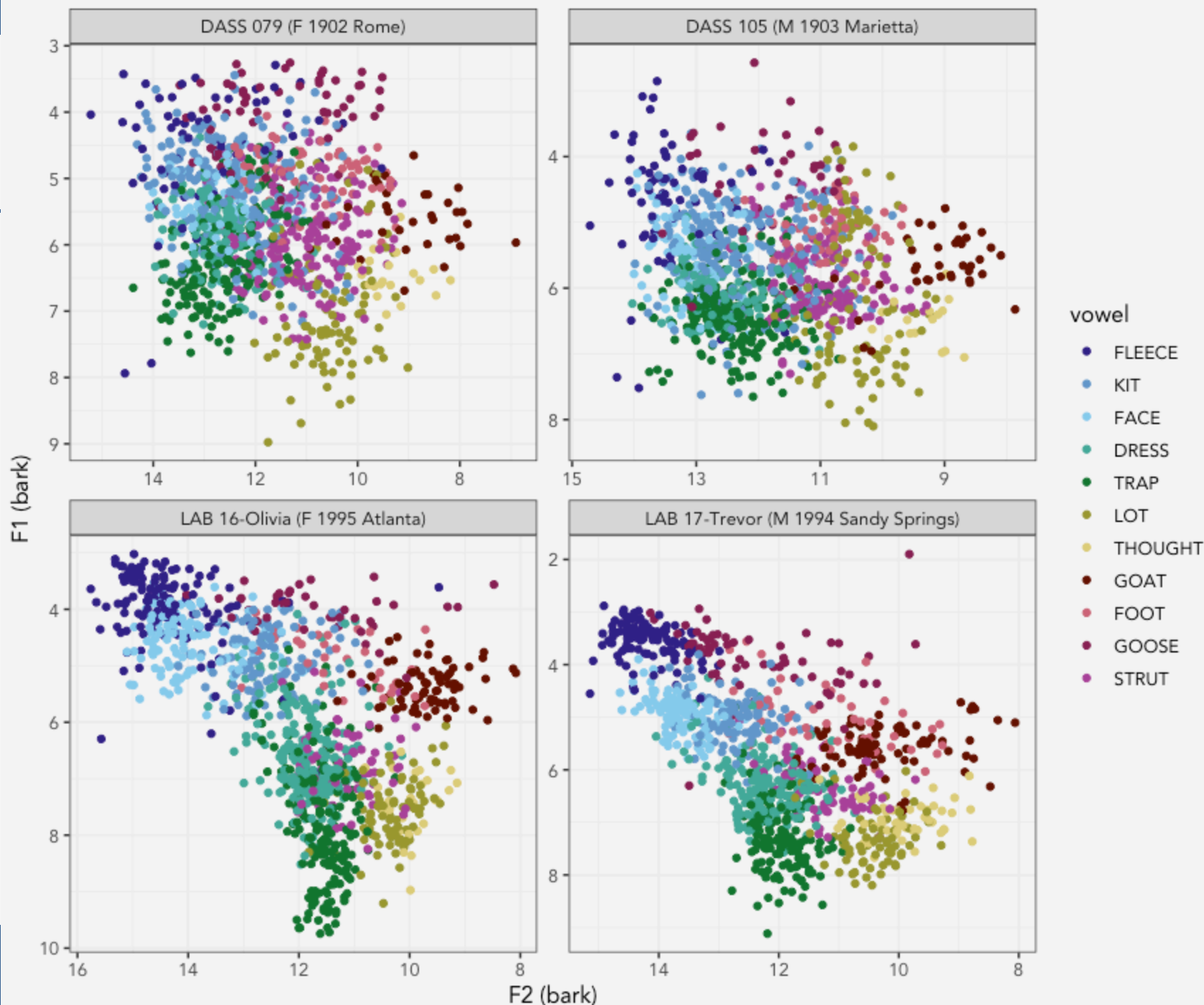
# PROCESSING

## Data filtering

- preobstruents only
- outlier detection with Mahalanobis Distance
  - furthest 5% of tokens removed

Normalized using the *Atlas of North American English* procedure (Labov, Ash, & Boberg 2006)

Converted to Barks



# STATS AND GAMMS

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Formant trajectories modeled with generalized additive mixed-effects models (Wood 2017).

- Fits a smoothed line to formant measurements along multiple timepoints
- 20%, 35%, midpoint, 65%, and 80% into the vowels' durations

Model specification (cf. Gahl & Baayen 2019, Renwick & Stanley forthcoming)

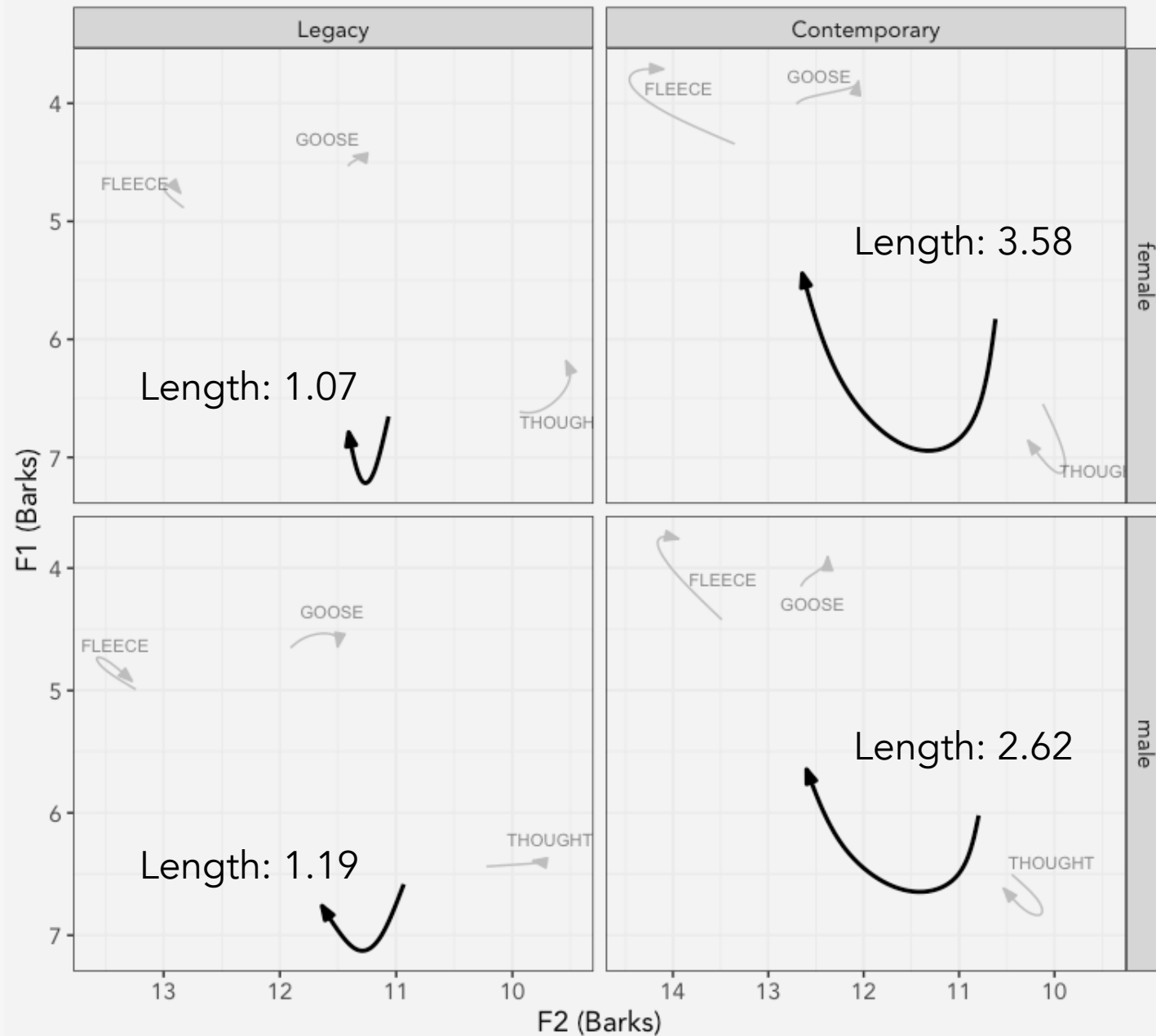
- all data pooled together
- formant, vowel, sex, and corpus as predictors
- speaker and word as random intercepts.

```
bam(bark_anae ~ s(percent, by = frmt_vwl_sx_crps, k = 4) +  
      frmt_vwl_sx_crps +  
      s(word, formant, bs = "re") +  
      s(speaker, formant, bs = "re"),  
    data = all, discrete = TRUE,  
    method = "fREML", nthreads = 4)
```

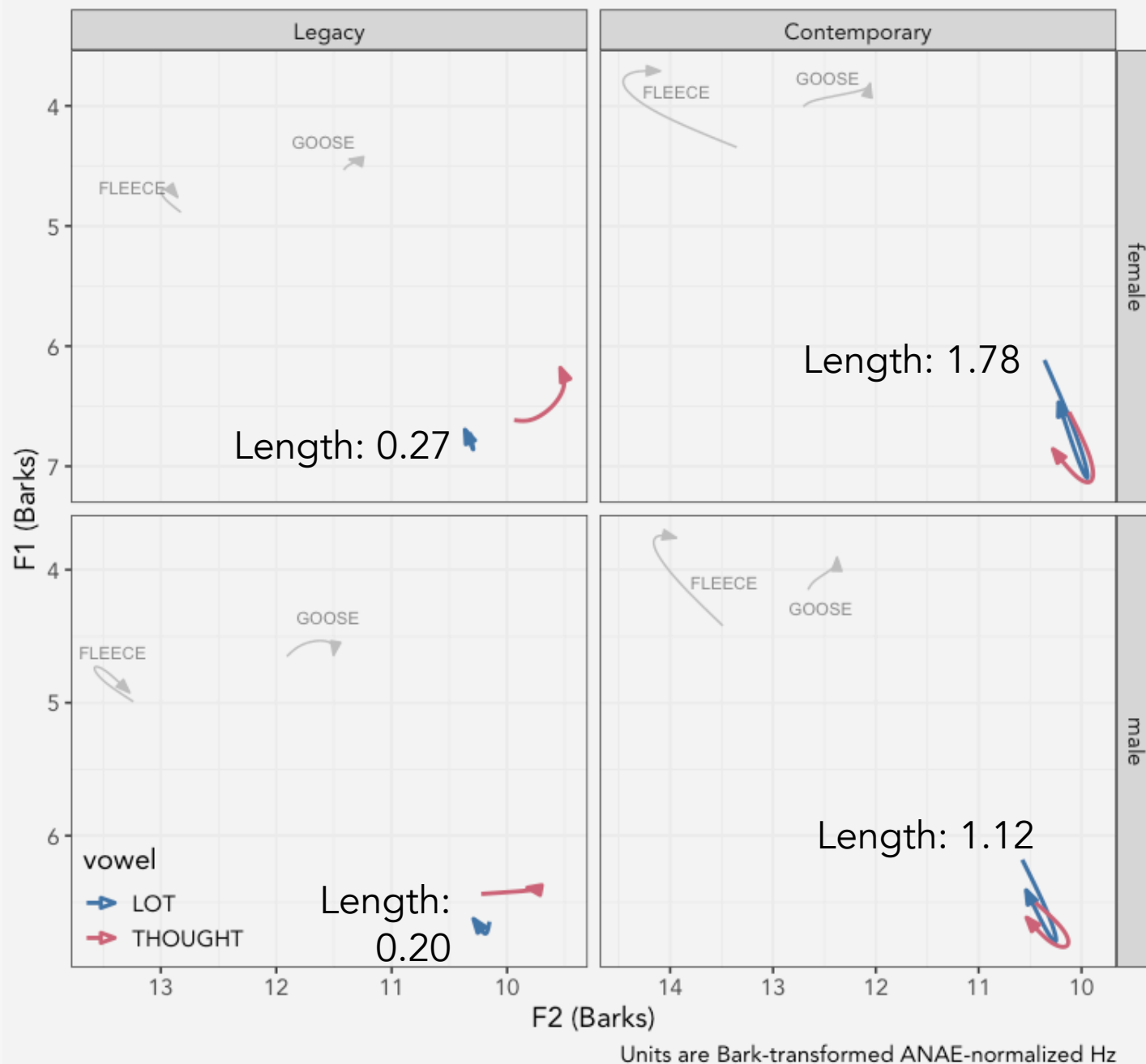
# RESULTS

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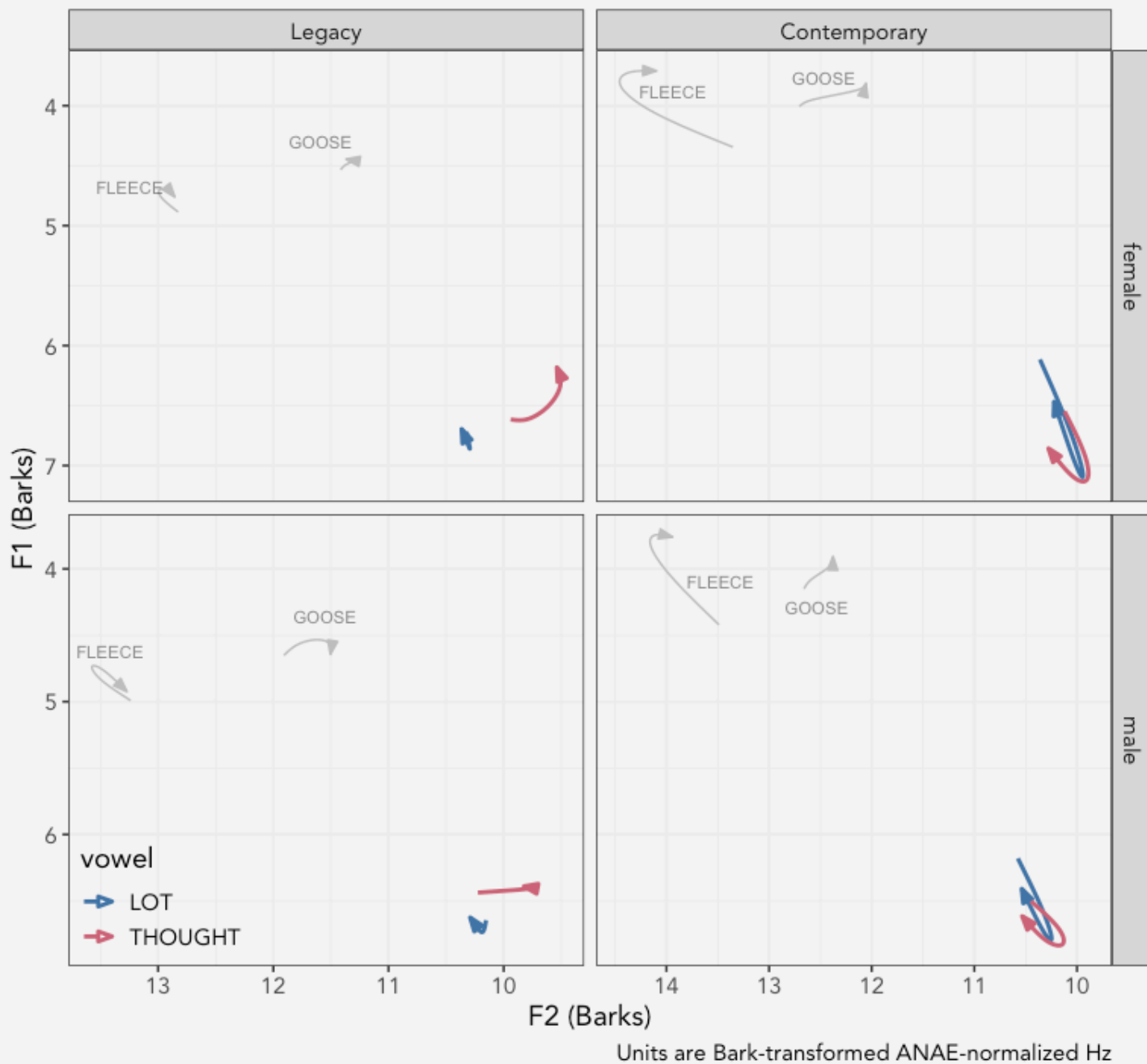
## PRICE-monophthongization



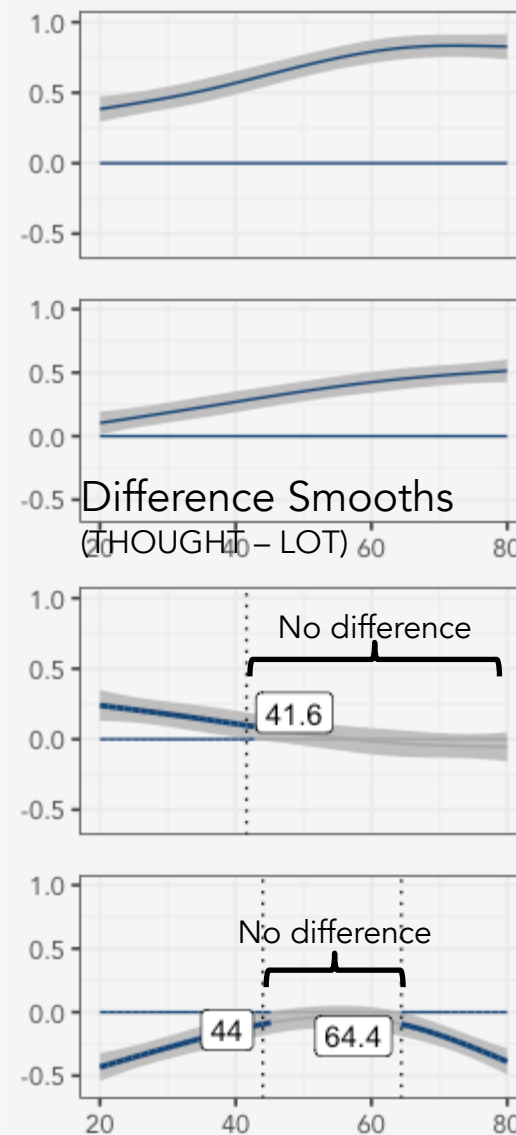
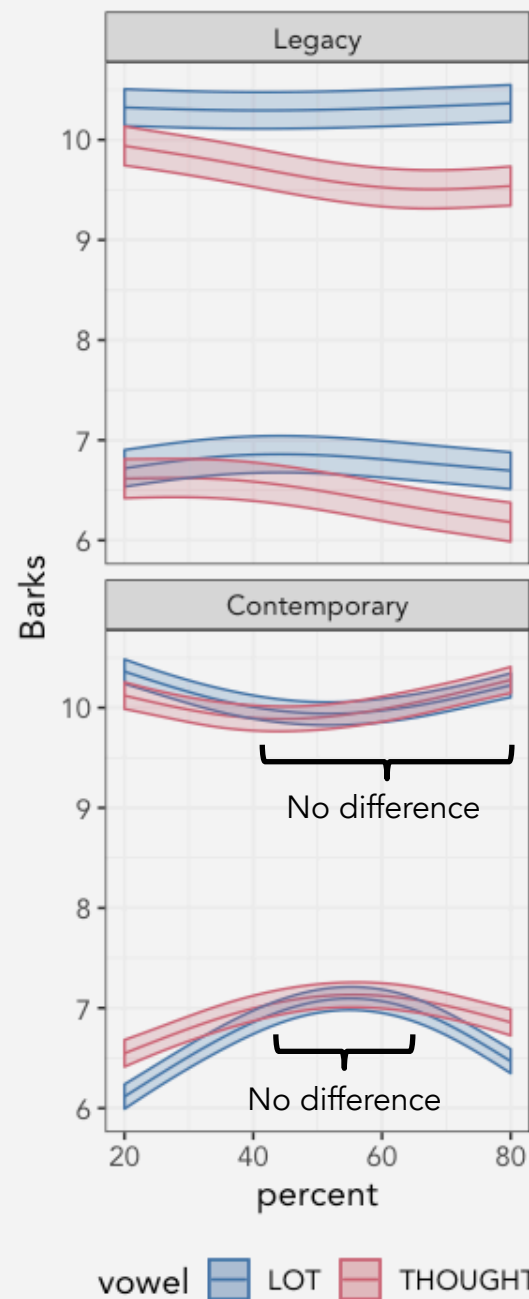
# Low Back Merger



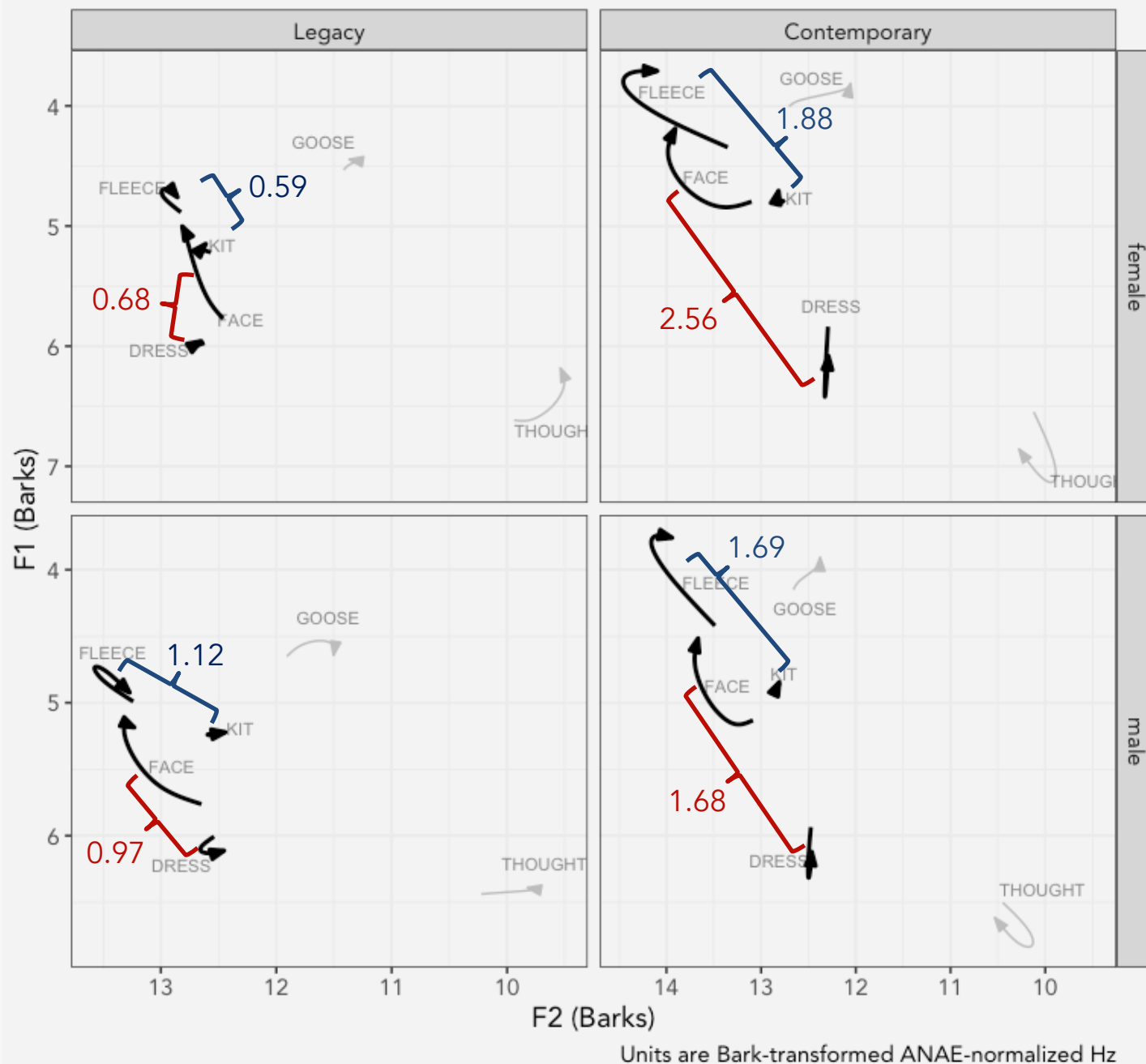
## Low Back Merger



## Spectrograms



# Southern Vowel Shift



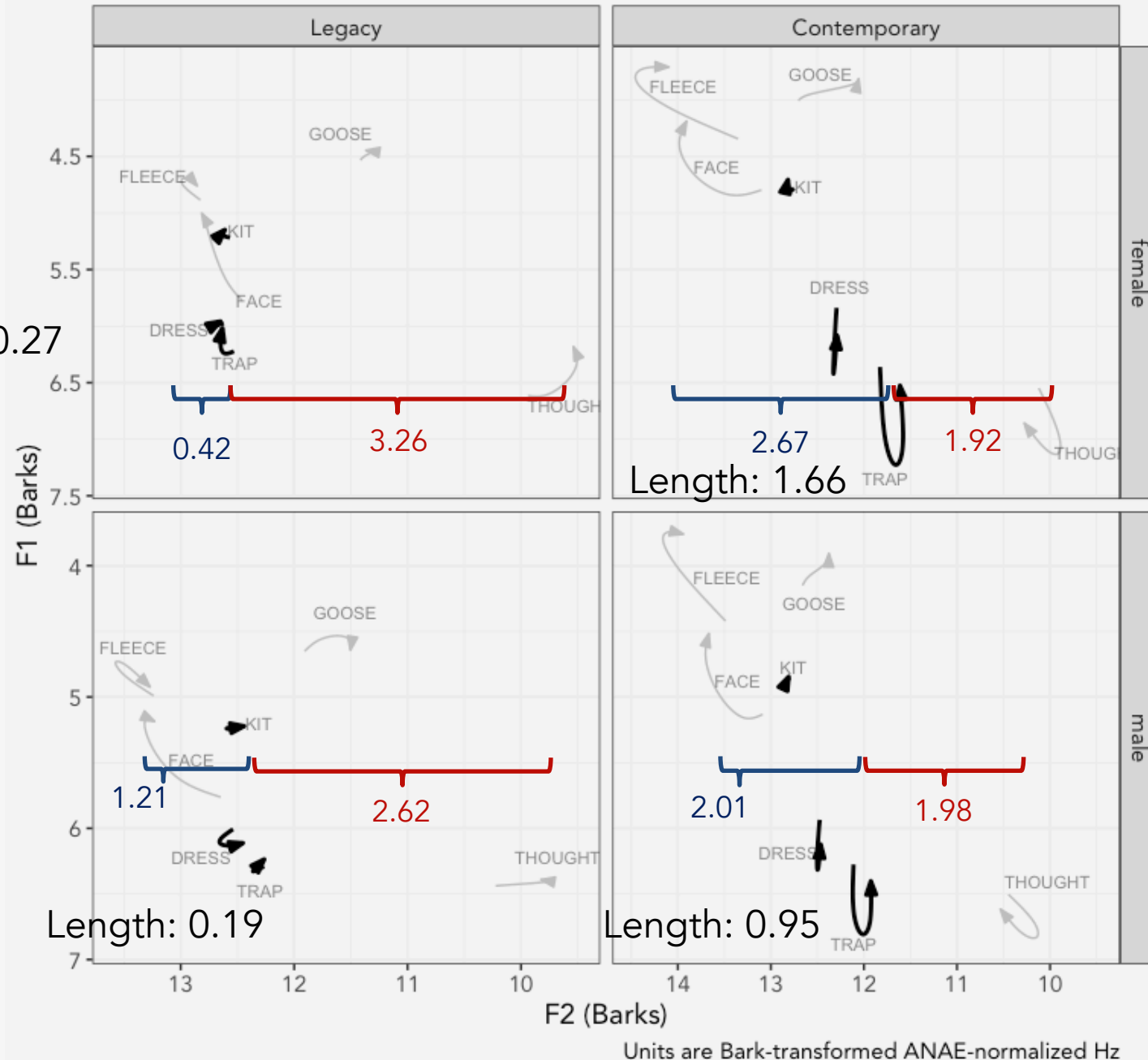
Euclidean Difference  
between FLEECE and KIT

(In Barks, from midpoints of  
predicted vowel trajectories)

Euclidean Difference  
between FACE and DRESS

# The Elsewhere Shift

Length: 0.27



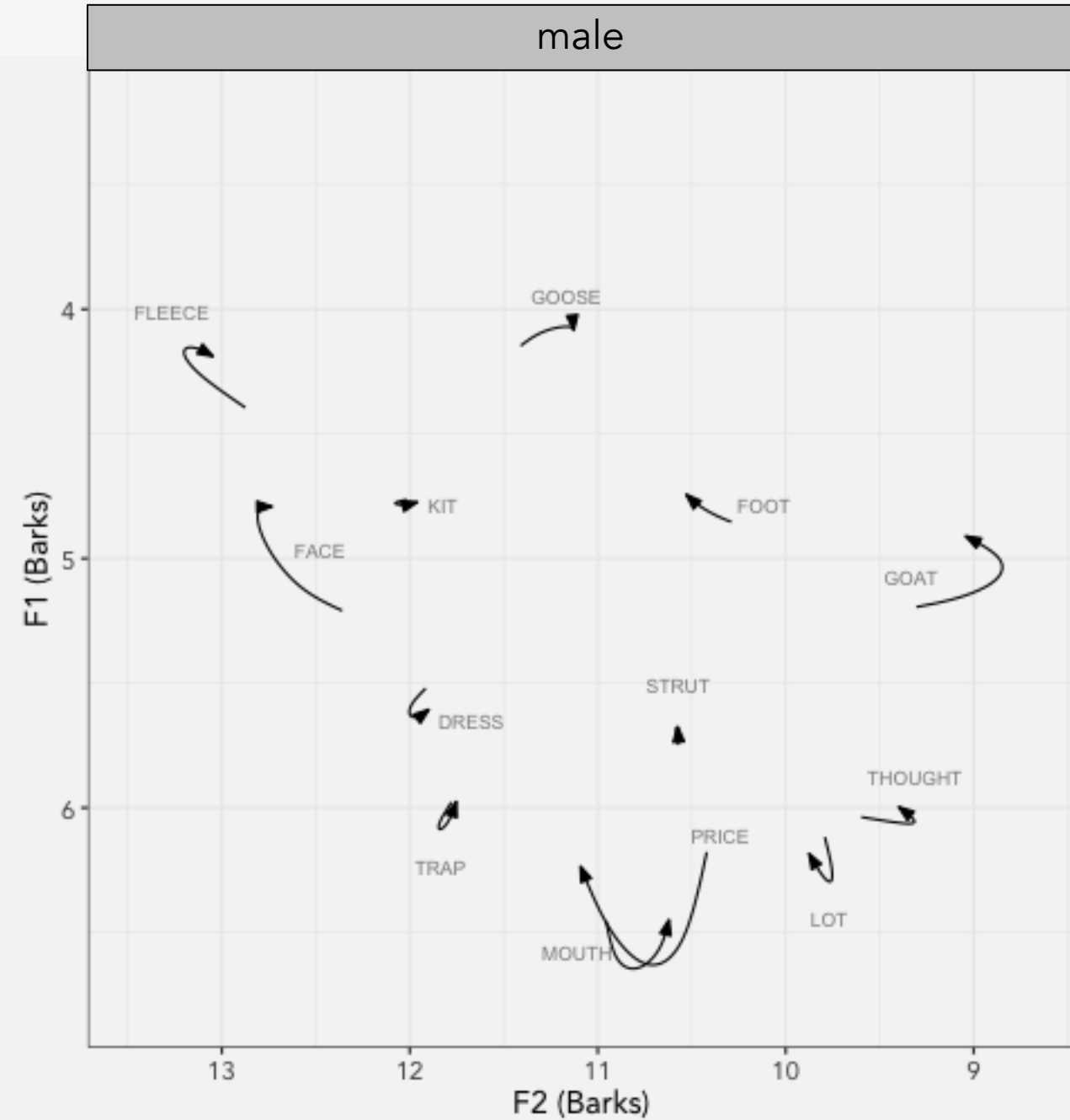
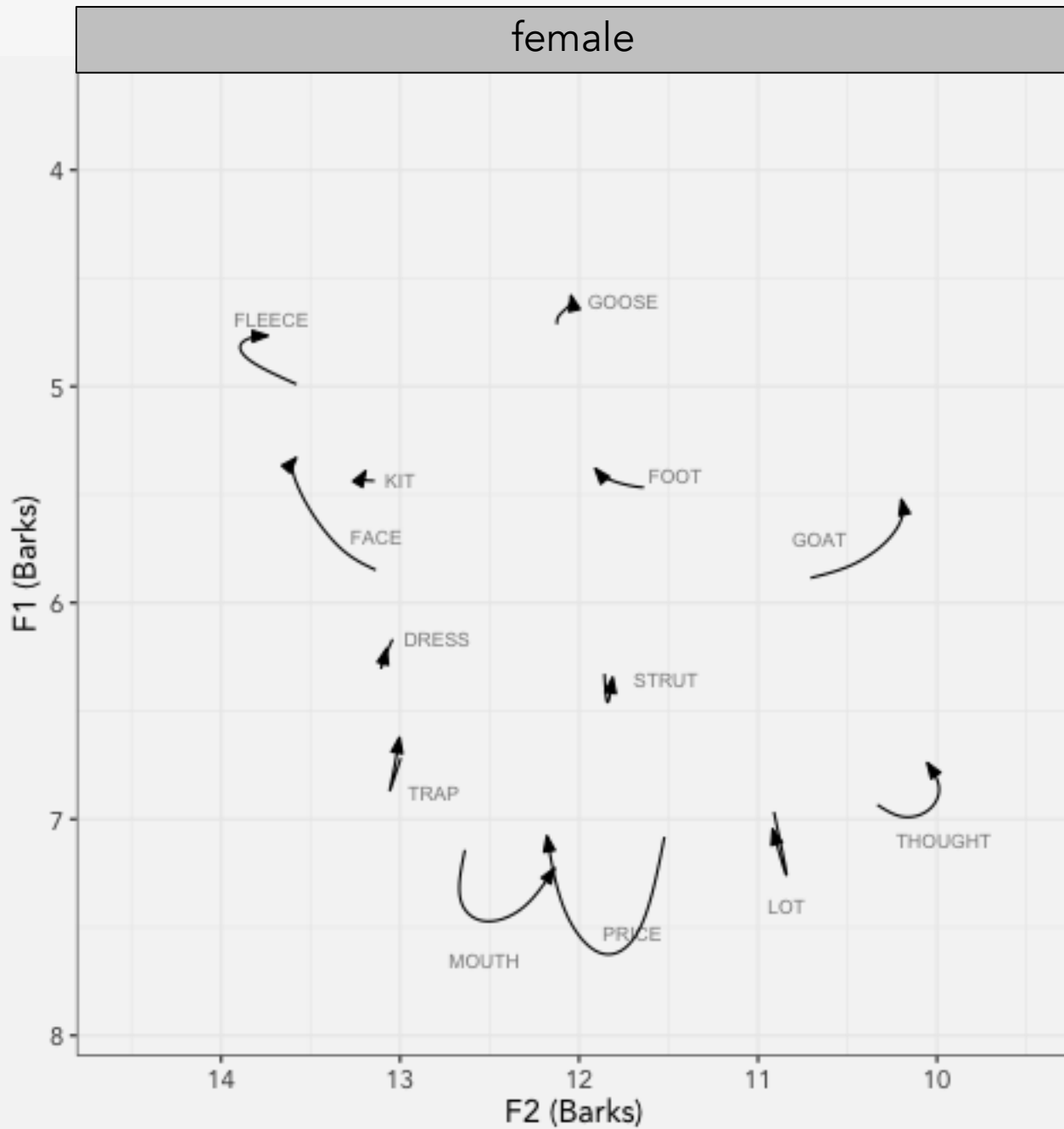
F2 Difference between  
FLEECE and TRAP

(In Barks, from midpoints of  
predicted vowel trajectories)

F2 Difference between  
FACE and THOUGHT



# Georgia Vowels: 1887 to 1998



# DISCUSSION

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# GEORGIA ENGLISH: THEN AND NOW

	Legacy Speakers	Contemporary Speakers
PRICE	monophthongal	very diphthongal
FLEECE-KIT and FACE-DRESS	close, but not swapped	not close
TRAP, DRESS, and KIT	front, monophthongal	retracted, more diphthongal
LOT and THOUGHT*	close, but not merged	close and possibly merged
GOOSE*	fronted and monophthongal	more diphthongal b/c onset

\* Ask me about these in the Q&A!

# THE ELSEWHERE SHIFT IN GEORGIA

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Is it inappropriate to say the SVS is “receding”?

- What are they reverting back to? 1850s English?

Better interpretation: Young Georgians are adopting the Elsewhere Shift

- The low back merger is (nearly) complete
- The front lax vowels have retracted.
- It’s happened in Oregon (Becker et al 2016), Washington (Stanley manuscript), Colorado (Holland & Brandenburg), Ohio (Durian 2012), and Michigan (Mason 2018). Why not Georgia too?

# CONCLUSION

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How has Georgia English changed since the 1890s?

All vowels have changed.

What is the trajectory of that change?

In the direction of the Elsewhere Shift.

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This slideshow available at  
[joeystanley.com/lcuga6](http://joeystanley.com/lcuga6)