



## BACKGROUND

British sociolinguistics has only recently started to investigate 'relative stability of people's grammars in adult life' (Sankoff 2013: 261)

### This talk:

Repercussions of community-wide changes in FACE and GOAT vowel on individual speakers in a small panel sample from North East England.

### 2 variable systems

	FACE	GOAT
Closing/standard diphthong	[eɪ]	[oʊ]
General northern monophthong	[e:]	[o:]
Local monophthong (only GOAT)		[ə:]
Localised centring diphthong	[ɪə]	[ʊə]

### Previous research using apparent time data shows levelling towards supra local forms

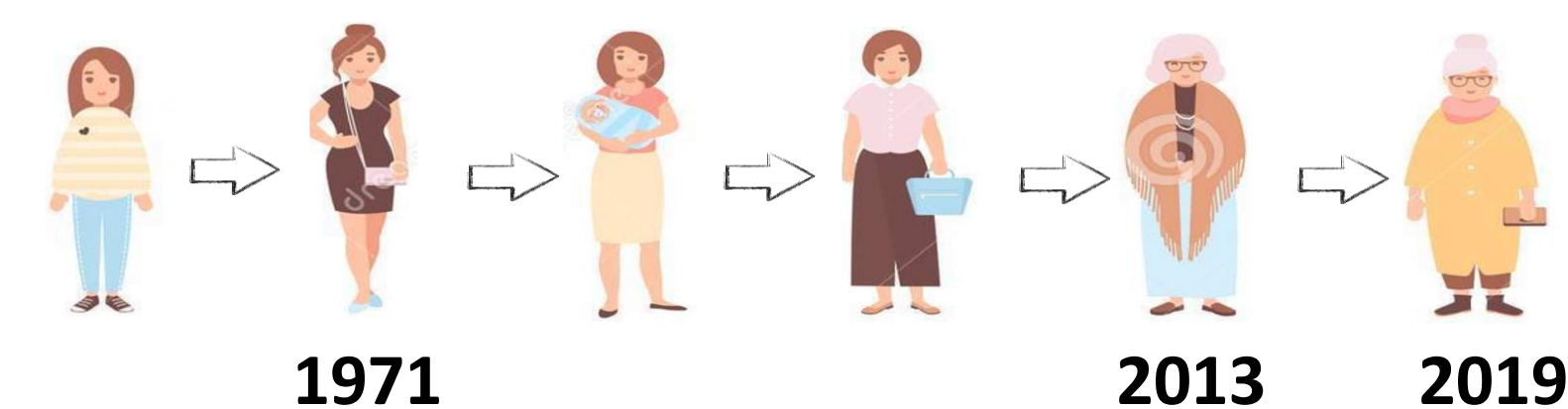
- **Watt (2000, 2002):** variants behave in lockstep (auditory analysis of apparent time data from Tyneside; see also Amand 2019)
  - Reduction of the localised centring variant
  - move towards pan-Northern monophthongs pushed forward by (young) women
- **Haddican et al. (2013):** shift towards standard forms (acoustic analysis of apparent time data from York)

**BUT:** Repercussions of community-wide changes across the life-span not fully understood

## METHODS & DATA

**Panel study:** 6 speakers re-recorded covering the stages that "give age meaning" (Eckert 1997: 167)

early adulthood, pre-retirement, post retirement

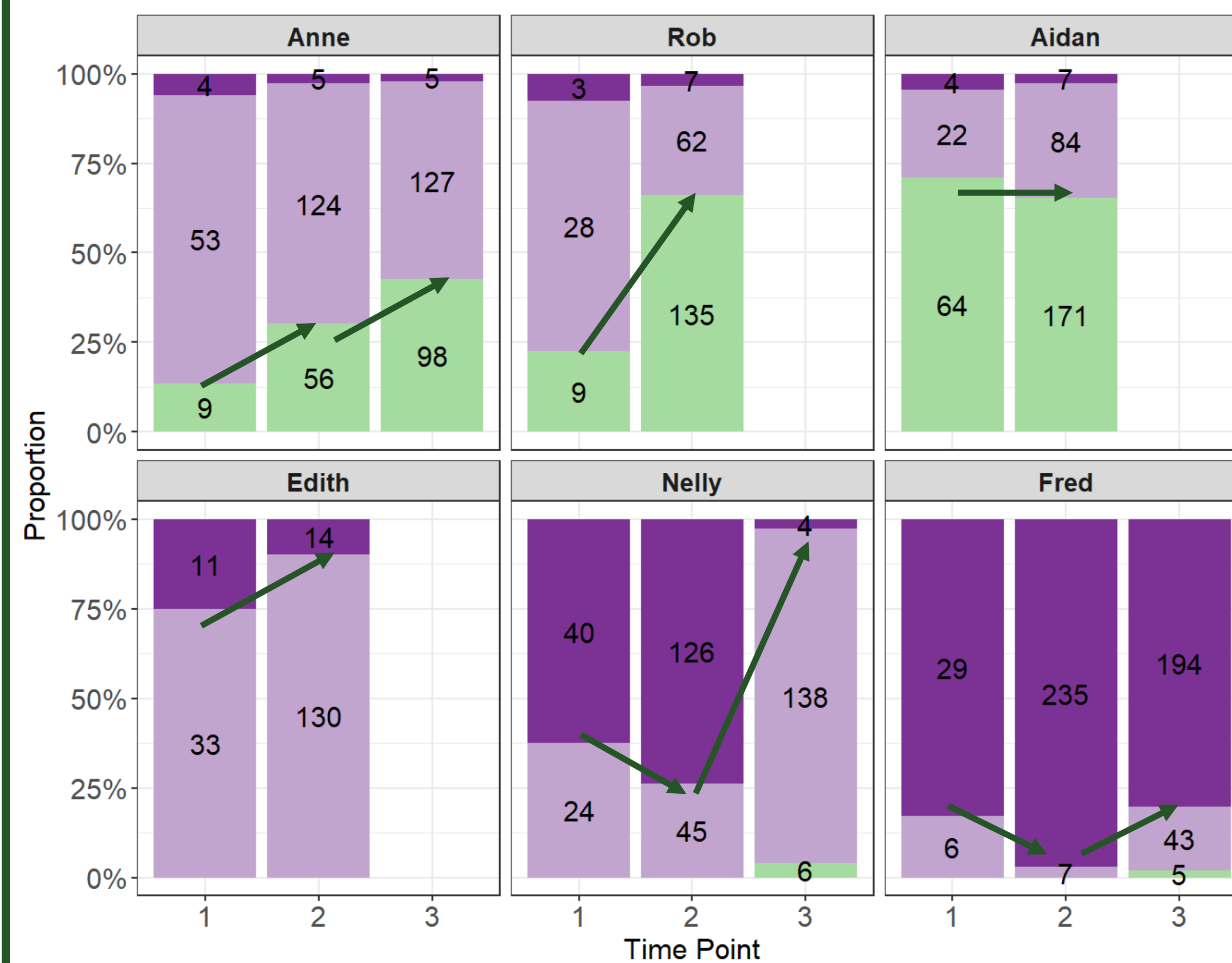


### Methods:

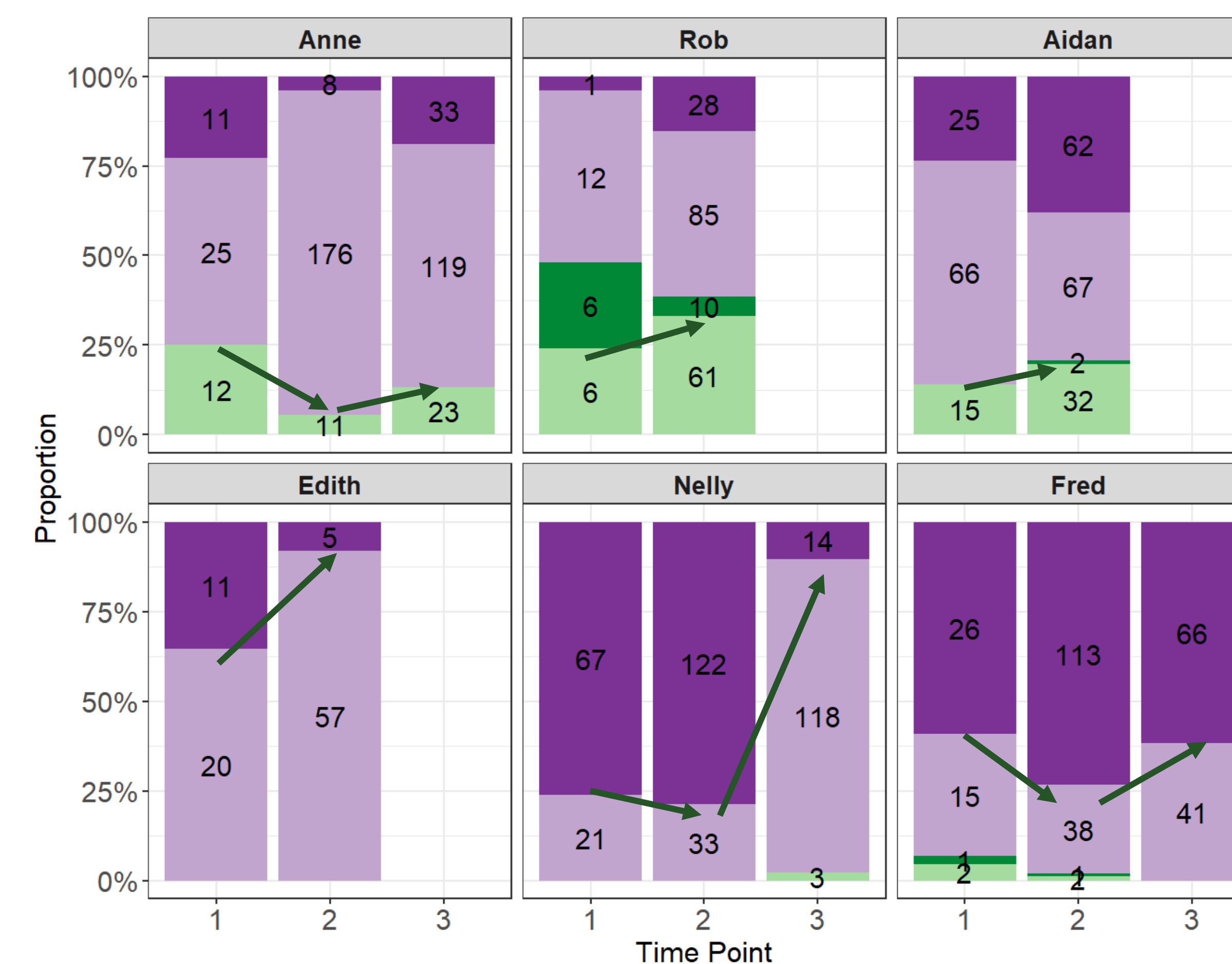
- Data transcribed in ELAN (Lausberg & Soletjes 2009)
- Force aligned in LABB-CAT (Fromont & Hay 2012)
- 11 points extracted along vowel trajectory
- 3,987 tokens of FACE and GOAT (normalised via Lobanov 1971)
- Auditory coding (2 coders)
- Acoustic data probed with GAMs

## RESULTS

### Realisation of FACE (in %) by speaker

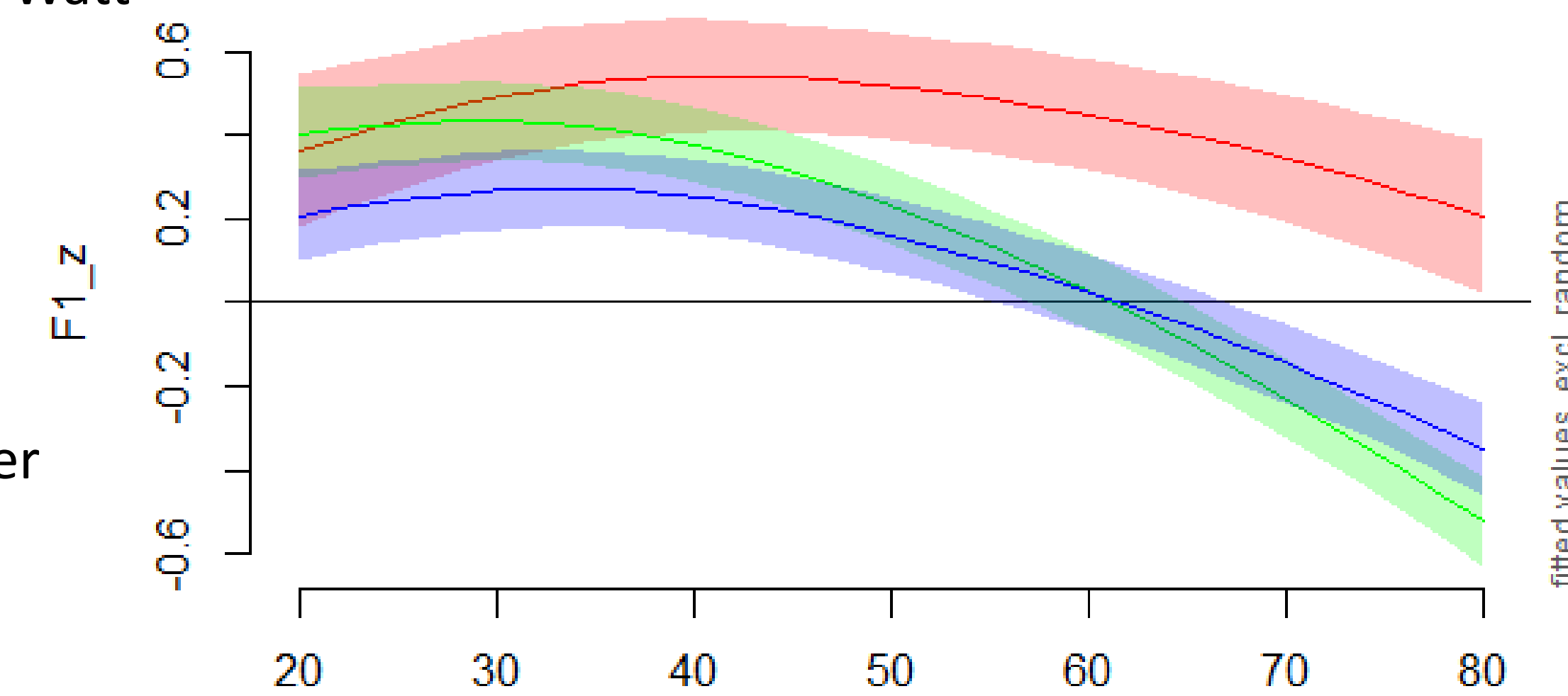


### Realisation of GOAT (in %) by speaker

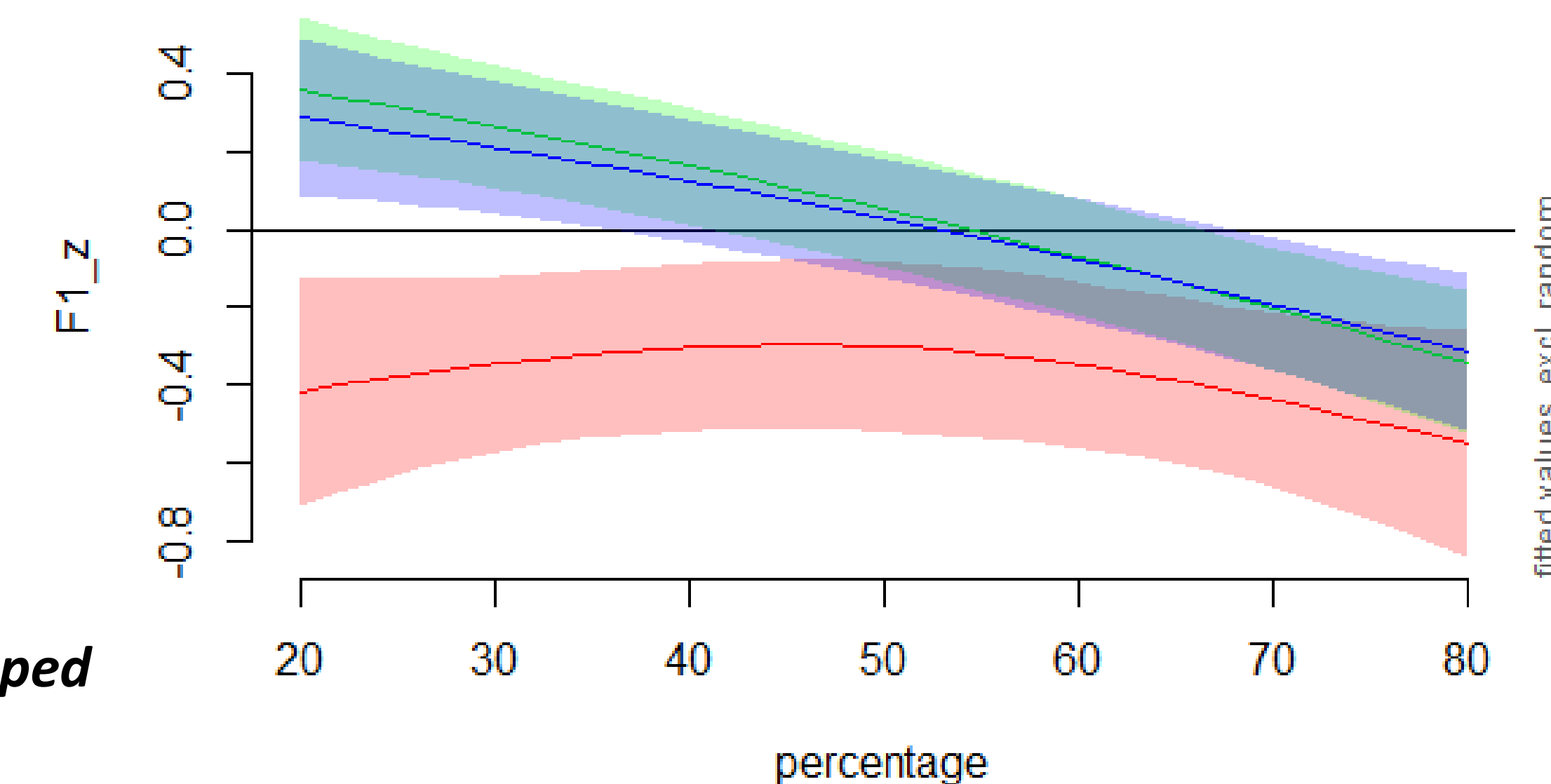


- 1 Most speakers are malleable in FACE & GOAT across the life-span; evidence of post-adolescent reaction to ongoing vowel changes  
 FACE + GOAT **do not** behave in lockstep for half our speakers (top row) (contra Watt 2000, 2002; Haddican et al. 2013)  
 → **Vowels seem to carry different indexicalities**; need for perceptual work (see Mechler ongoing)
- 2 Effect of socio-demographic trajectory on intra-speaker malleability:
  - **WC speakers** (Anne, Rob, Edith): increase in localised vowel realizations over their life-spans (clear for FACE, less so for GOAT)
  - **MC speakers** (Aidan, Nelly, Fred): show U-shaped curve  
 → **Retrenchment towards standard followed by tail in localised forms post-retirement**
- 3 Changes in proportion paralleled in F1/F2 space for some speakers  
**Fred**  
**FACE F1 (closing variant)**
  - T1 to T2: retrenchment corresponds to increasingly diphthongal variants
  - T2 to T3: tail corresponds to slight reduction in diphthongalness**GOAT F1 (closing variant)**
  - T1 to T2: retrenchment corresponds to increasingly diphthongal variants
  - T2 to T3: no acoustic evidence of a tail
 → **FACE & GOAT do not behave in lockstep acoustically, despite similar U-shaped trajectories in proportional realization**

### Fred FACE (closing) F1



### Fred GOAT (closing) F1



## MAIN CONTRIBUTIONS

- 3-wave panel study on life-span changes
- Auditory and acoustic analysis of recent changes in Geordie vowels (cf. Amand 2016 for 1970s and 1990s)

## DISCUSSION & CONCLUSION

Increased resolution into life-span change. Three take-aways:

- 1 Most speakers change – few are stable
- 2 Responses to changes in progress heavily mediated by individuated positioning to marketplace pressures
  - WC oriented speakers: increased preference for local features
  - MC oriented speakers: U-shaped curve for standard variants
- 3 Some speakers show phonetic changes that pattern with proportional changes
  - Fred shows preference for more standard (=more diphthongal) FACE at T2; abates at T3

Our analysis provides empirical evidence for the hypothesized U-shaped curve (Buchstaller et al. 2017)

**BUT:** Mediated by socio-demographic orientations/trajectories

We require dynamic panel data to understand variability across the community and the life-span as a whole.

## REFERENCES

Amand. 2016. La constitution d'un corpus de Geordie parlé: Choix épistémologiques et réalisations empiriques. Retour sur un demi-siècle de sociophonétique Anglaise. *Histoire Épistémologie Langage* 38(2), 9–21. Amand. 2019. Analyse sociophonétique de l'anglais de Tyneside dans le corpus DECTE: le cas des voyelles FACE, GOAT, PRICE et MOUTH. *Linguistics*. Université de Paris. Buchstaller et al. 2017. Levelling across the life-span? Tracing the face vowel in panel data from the North East of England. *Journal of Sociolinguistics* 21(1), 3–33. Eckert. 1997. Age as a sociolinguistic variable. In *The Handbook of Sociolinguistics*, 151–167. Blackwell. Fromont/Hay. 2012. LABB-CAT: an Annotation Store. *Australasian Language Technology Association Workshop*. Haddican et al. 2013. Interaction of social and linguistic constraints on two vowel changes in northern England. *Language Variation and Change* 25, 371–403. Lausberg/Sloetjes. 2009. Coding gestural behavior with the NEUROGES-ELAN system. *Behavior Research Methods, Instruments, & Computers* 41(3), 841–849. Lobanov. 1971. Classification of Russian vowels spoken by different speakers. *The Journal of the Acoustical Society of America* 49(2B), 606–608. Sankoff. 2013. Longitudinal studies. In *The Oxford handbook of sociolinguistics*. Watt. 2000. Phonetic parallels between the close-mid vowels of Tyneside English: Are they internally or externally motivated? *Language Variation and Change* 12, 69–101. Watt. 2002. 'I don't speak with a Geordie accent, I speak like, the Northern accent': Contact-induced levelling in the Tyneside vowel system. *Journal of Sociolinguistics* 6(1), 44–63.