

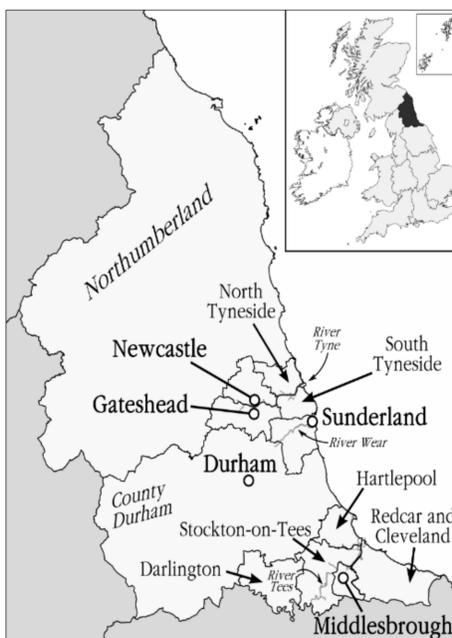


BACKGROUND

Tyneside, North-East England

- Historically, monophthongal realization of mid-vowels FACE and GOAT
- Change in apparent time towards pan-Northern monophthongs at expense of localized variants (see Watt 1999, 2000, 2002)

Type	Realization	Social correlates
Pan-northern monophthong	[o:]	Normative in Tyneside
Localized central monophthong	[e:]	Working-class men, abating over time
Localized ingliding diphthong	[ʊə]	Working-class men, abating over time
Standard closing diphthong	[ou]	Prescribed form, Middle-class (esp.) women



DATA & METHODS

Panel sample: 12 Tyneside English speakers re-recorded at least once

Old Panel:

recorded in 1971 (n=6), 2013 (n=6), and ~2019 (n=3)

Young Panel:

recorded in ~2009 (n=7), ~2014 (n=7), and 2019 (n=1)

Analysis pipelines

- Transcription in ELAN (Lausberg & Sloetjes 2009)
- Proportional analysis:** Auditory coding (n=2,484), token cap at 5 instances/lexeme, 2-3 time points
- Acoustic analysis:** Charlotte at 3 time points (n=540)
 - force-alignment in LaBB-CAT (Fromont & Hay 2012)
 - boundaries checked in Praat (Boersma 2001)
 - F1 and F2 extraction from 20-80% at 10% intervals
 - linear mixed-effects models fit to F1 & F2

RESEARCH QUESTIONS

- How do realizations of GOAT pattern for individuals over the lifespan?
- What insight do these changes provide into the role played by marketplace pressures and age on a variable undergoing change in progress?

RESULTS

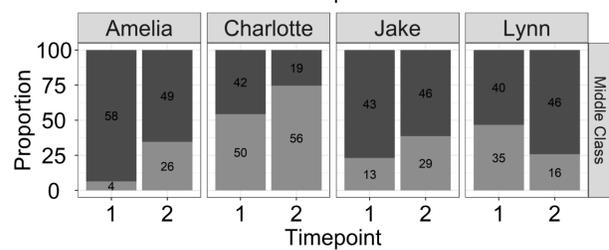
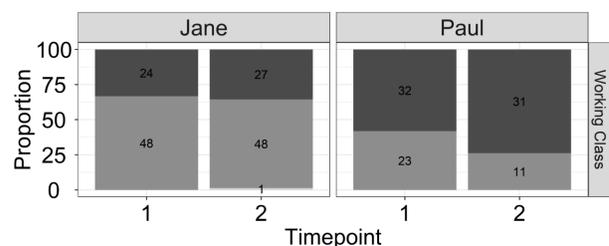
Old Panel

- General preference for the pan-Northern monophthong
 - WC speakers realize higher proportions of local and localized variants
 - MC speakers and social risers (=upwardly mobile speakers) prefer standard forms

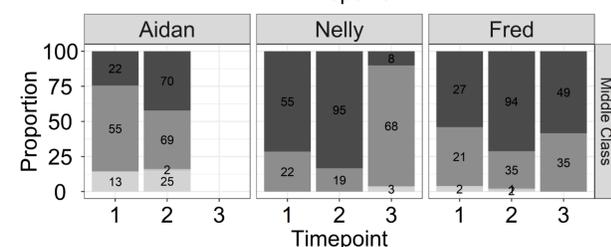
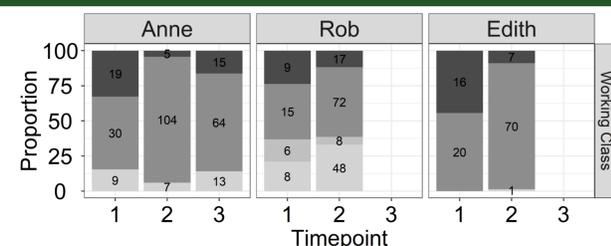
Change across the lifespan:

 highly individualized patterns mediated by social class

- WC speakers show individual differences but move away from localized variants over time
- MC speakers show clear retrenchment from T1 to T2, then tail at T3 away from closing variant
 - Retrenchment towards prescribed standard variant in active years as teachers
 - Post-retirement relaxation away from standard variant (Nelly even shows localized forms at T3)



■ closing (Standard) ■ inglide (Local)
■ central monophthong (Local) ■ monophthong (Northern)



■ closing (Standard) ■ central monophthong (Local)
■ inglide (Local) ■ monophthong (Northern)

Young Panel

- Variants restricted to pan-Northern monophthong and standard closing diphthong

Change across the lifespan:

 3 patterns, not clearly mediated by class

- Stable preference for pan-Northern monophthong (Jane)
- Shift towards pan-Northern monophthong at expense of closing diphthong for MC speakers and social risers (Amelia, Charlotte, Jake)
- Shift away from pan-Northern monophthong (Lynn, Paul) contra apparent time findings

Acoustic analysis

Charlotte: Student (T1) → PhD student (T2) → Lecturer in the North-East (T3)

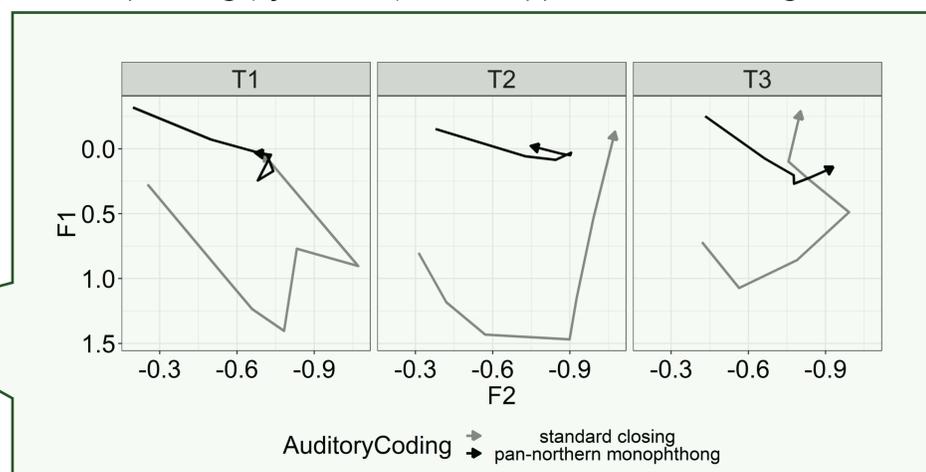
Monophthongal GOAT:

- Shortest trajectory at T2 compared with either T1 or T3
- Higher midpoint at T2 compared with T1 or T3
- Preceding coronal motivates frontier GOAT at T3 *only*

Closing GOAT:

- No significant effects

→ **Changes in in acoustic implementation mirror changes in proportion**



KEY TAKE-AWAYS

Socially-niched patterns for old panel:

- Linguistic marketplace pressures operative (Bourdieu & Boltanski 1975)
 - MC and social risers work in education (overt valuation of standard language)
 - Movement towards standard GOAT highest when maximum exposure to such beliefs is highest
 - Tail in post-retirement reflects relaxation of these pressures

Individualized patterns for young panel

- E.g., educators (Amelia, Charlotte, Lynn) show different patterns

A marriage of auditory and acoustic work

- Charlotte's increase in monophthongal GOAT corresponds with more monophthongal acoustic implementation
- Emerging phonological contrast at T3?

Do these changes track with FACE over the lifespan?

(Buchstaller et al. 2017)

- Not always! Rob & Fred show parallel behaviour, but others don't!
- Suggests that while these vowels are structurally linked (see, e.g., Watt 2000, 2002), they may index different meanings

