



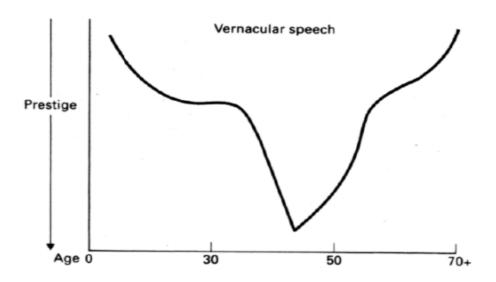




Age-graded patterns in the realisation of (ing): Expanding the window of analysis into middle and old age

Johanna Mechler & Isabelle Buchstaller (Sociolab, University of Duisburg-Essen)

Sociolinguistic theory makes clear and testable predictions regarding the use of stable vernacular features across the lifespan of the individual (Downes 1998, Labov 2001).



General pattern of age-grading (reproduced from Downes 1998: 224).

Age-grading:

fixed association of vernacular forms with certain portions of the life span, such as adolescence or old age.

BUT: We lack real time evidence on the age-graded nature of stable variability.

(ing) is a paradigm case for a stable variable (Wagner 2012)

Sociolinguistic marker: class, occupation, socio-economic aspirations and gender function as explanatory parameters for its social and stylistic stratification (Hazen 2006, Labov 2001, Trudgill 1974, Eckert 2005).

Two panel studies on the use of (ing)

- speakers' sociolectal adjustment during primary/secondary schooling (Wolfram and van Hofwegen 2010, 2017)
- as a consequence of educational choices at the juncture between high school and university (Wagner 2012).

What about speakers' malleability in the realisation of the alveolar/velar nasal across their later life?

Pichler, Wagner and Hesson (2018:2): Variationists have been "blind to the rich heterogeneity of old age populations"

→ How do older adults attend to sociolinguistic variation?
What are the structuring parameters of heterogeneity in older populations?

This talk:

Analysis of the variable linguistic choices in the realisation of (ing) across the life-span Six speakers interviewed when they were in their 20s/30s in 1971 and again when they had reached retirement age in 2013.

We expand on previous panel research on (ing) in two ways:

- focus on the linguistic trajectory from early adulthood to older age. Moving forward the age bracket of Van Hofwegen and Wolfram (2017: speakers ages 4-20) and Wagner (2012: speakers ages 17-19) into old age
- use of mixed-effects logistic regression analyses to explore the longitudinal (in)stability in the conditioning effects which that governs (ing) (see Buchstaller et al. 2017).

Research on (ing) across social and geographical space has reported consistent patterns:

- gender
- socio-demographic standing
- speaking style (Hazen 2006)

intralinguistic factors (Bailey 2018, Meyerhoff and Schleef 2012, Labov 2001 and Hazen 2006)

- phonological context
- priming effects
- grammatical category of the word containing (ing) (Schleef et al. 2011)

No research maps changes in the constraints which condition the realisation of (ing) across the life-span.

Tyneside has seen several corpus compilation projects,

- the Tyneside Linguistic Survey
 (TLS, data collected in 1969-1971),
- the *Phonological Variation and Change in Contemporary Spoken British English* (PVC, conducted in 1994)
- and the monitor corpus *Diachronic Electronic Corpus of Tyneside English* (DECTE, 2007 ongoing).



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Panel corpus:

Six individuals who were interviewed in 1971 in the course of the TLS

.... re-recorded in 2013 using the same fieldwork methods (Buchstaller 2015: 461; Mearns et al. 2016).







Name	Age	Profession (1971)	Age	Profession (2013)	Trajectory
Nelly	29	Nursery nurse/housewife	71	Retired housewife	Stable MC
Edith	32	Co-op saleswoman/house help	74	Retired house help	Stable WC
Rob	23	Engraver	66	Engraver	Stable WC
Anne	23	Seamstress	64	Retired seamstress	Stable UWC
Aidan	25	Welder, lecturer	66	Retired lecturer	Upward WC \rightarrow MC
Fred	21	Clerk, student teacher	63	Retired religious education teacher	Upward WC \rightarrow MC

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Biographical approach (see Pichler, Wagner and Hesson 2018, Gerstenberg to appear)

- Life-course perspective on ageing
- Investigation of the cultural and historical context as well as the personal events that might have an effect on linguistic choices
- → How do these speakers linguistically construct their age-based identities?

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Data extraction and coding

- All tokens of word-final -ing in polysyllabic words hand-coded into PRAAT by the first author.
- Problem cases were discussed with the second author.
- Excluded from the final sample: Ambiguous cases (N= 18)

All tokens of *something* (N=57)

Tokens realized as [1ŋk] (N=14)

Dependent variable:

(ing) realised as [In] or [In]

Independent variables (Bailey 2018, Meyerhoff and Schleef 2012, Schleef et al. 2011):

- Preceding nasal (priming effect): alveolar, velar, neither
- Preceding linguistic context: alveolar, velar, other
- Following linguistic context: alveolar, velar, pause, other
- Number of syllables
- Grammatical category (Huddleston and Pullum 2002): gerund-participle, gerundial noun, part. adjective, other

Dependent variable:

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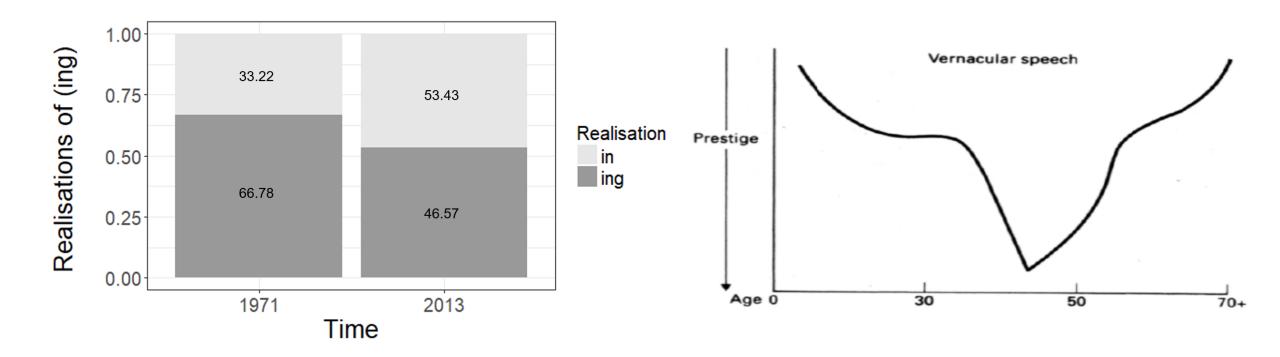
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- Following linguistic context: alveolar, velar, pause, other
- Number of syllables
- Grammatical category (Huddleston and Pullum 2002): gerund-participle, gerundial noun, part. adjective, other
- Part in the interview (Wagner 2012)
- Genre/topic: metalinguistic commentary, reported speech, other

Separate mixed-effects logistic regression analyses – one per speaker - in package lme4 in R (Bates et al. 2016).

- All factors included as fixed-effect predictors.
- The word in which (ing) occurred was set as a random factor.
- Interaction effects between individual predictor and recoding time were interpreted as evidence that this predictor has changed over time (Buchstaller et al. 2016).
- → Assess longitudinal (in)stability in constraint systems that governs speakers' realisation of (ing)

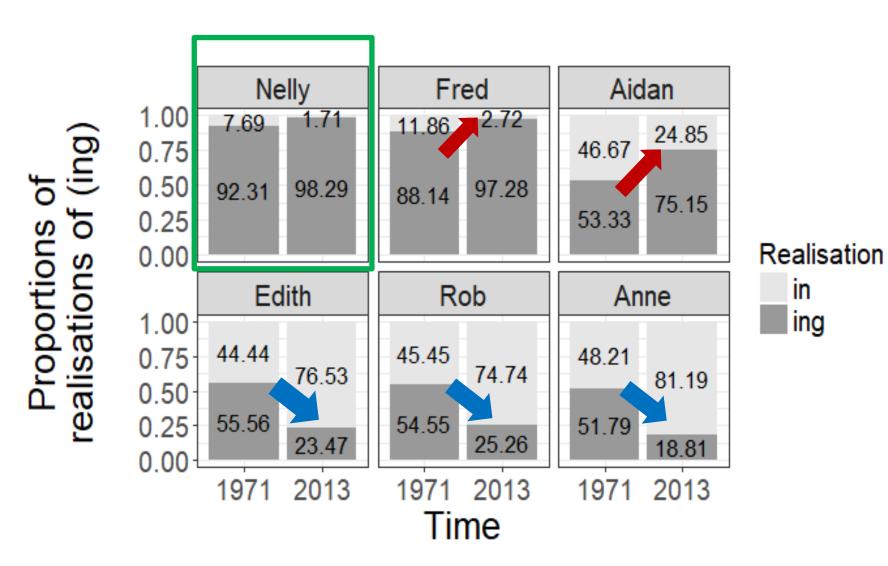
Results – aggregate panel sample



The aggregate panel become more vernacular between middle adulthood and old age ($X^2(1)$ = 16.166, p<0.001). Our panel sample adds evidence from later life-stages to the age-graded nature of (ing).

BUT: Considerable heterogeneity!

Results – aggregate panel sample



Socio-demographic trajectory

- Socially stable MC speaker: **Nelly** remains stable across her lifespan.
- Social risers:

in

ing

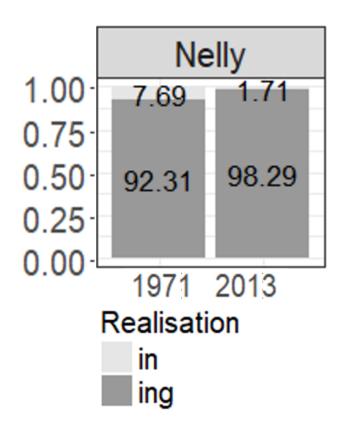
Fred and Aidan move significantly towards the standard.

Socially stable WC individuals:

Anne, Rob and Edith revert to more vernacular realisations.

BUT: Rich individual life-histories

Stable MC speaker: Stability across the life-span



Nelly: Fisher's exact test p>0.05, n.s.

Proportional distribution of variants:

Realisation of (ing) stays stable across the two data-sets

Nelly: Going to Gosforth, I had to alter my accent with the children there. So it

was difficult but you just adapted.

Int: Yeah, did you alter it .. in the sense of becoming more kind of neutral and?

Nelly: **More neutral**.

Int: Mm.

Nelly: And posh. So you just sort of adapted You came home ... and I just

didn't realize I was doing it but it was just -- because you spoke like that

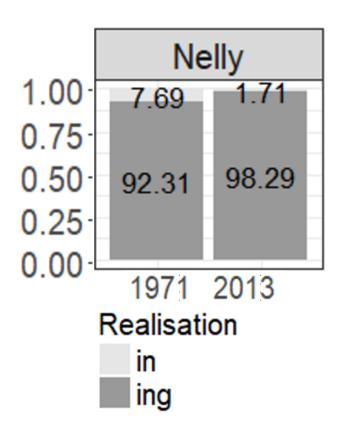
when you were working.

...

Int: And that **stuck with you** even when you stopped?

Nelly: Yes, it did yes.

Stable MC speaker: Stability across the life-span



Nelly: Fisher's exact test p>0.05, n.s.

Proportional distribution of variants:

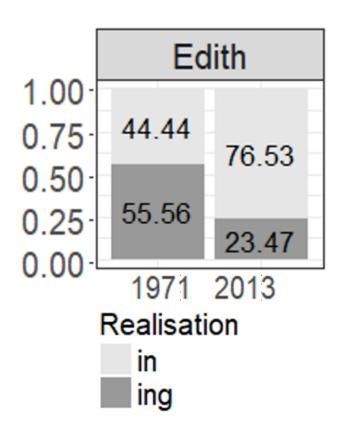
Realisation of (ing) stays stable across the two data-sets

Constraints:

Mixed-effects regression analysis:

No sign. interaction between predictors and the time of recording.

→ Nelly's overall constraint system has remained stable across time.



Edith $X^2(1) = 11.009, p < 0.001$

Proportional distribution of variants:

Increasing rates of vernacular nasal forms.

Pressures of the linguistic marketplace in middle age (Sankoff and Laberge 1978, Chambers 1990).

1971: Edith was working as a salesperson at the co-op shop

2013: Edith is retired: Vernacular resurfaces

Attitudes towards her local vernacular at different stages of her life

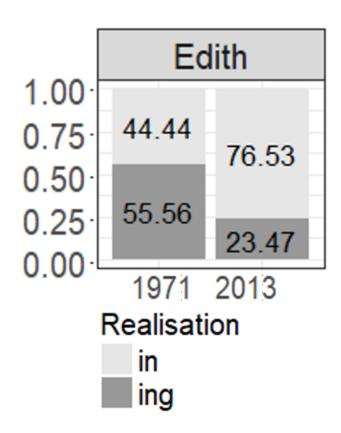
Edith, 1971

Int: You've ... tried to make any permanent changes in the way you talk?

Edith: Oh wey I would like to talk nice like. It's ... I don't like Geordie eh

Int: Do you not?

Edith: No no I don't think it sounds nice.



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Edith, 2013

Int: Do you speak the same now as when you were a child?

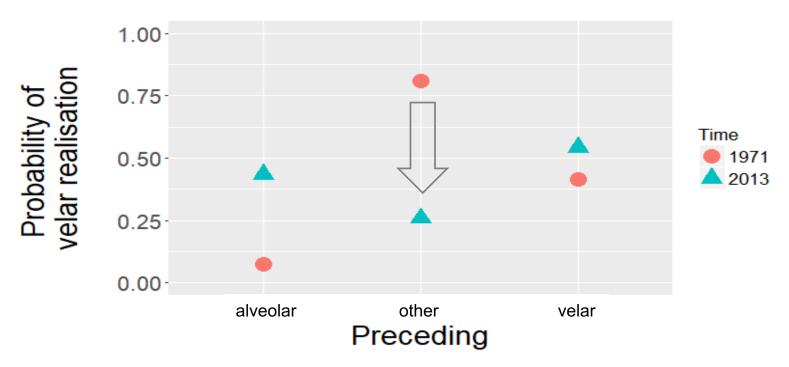
Edith: Never changed. Never will now. [...] And I'm just talk[In] ordinary. [...]

I think it's just go[ɪn] out the Geordie dialect like. [...] And about the parents

should be teach[In] the kids how to talk properly ... you know?

So they are want[In] the **Geordie dialect out**.

Edith

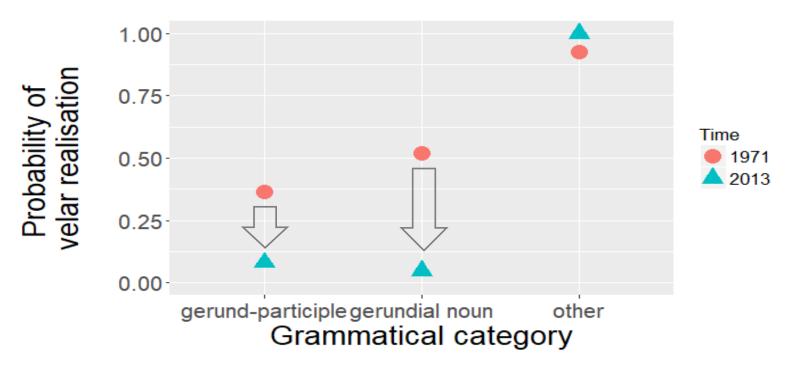


Interaction effects:

1971:Preceding'alveolar' reference level

2013:Preceding'other' -4.7288 -2.471 0.0135 * 2013:Preceding'velar' -1.7256 -0.778 0.4363

Edith



Interaction effects: 1917:GC'ger.-part.' 2013:GC'ger. noun' 2013:GC'other'

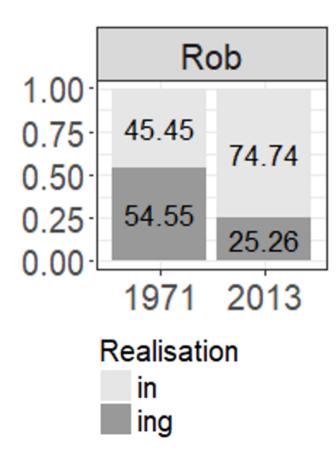
reference level -1.2142 7.6172

-0.489 C 0.499 0.6177

0.6247

Results Edith

- proportional choices in the (ing) variable are unstable across time
- the effect of two predictors
 which condition her variable
 choices has changed across
 the two recordings.
- → Edith's variable grammar has changed.



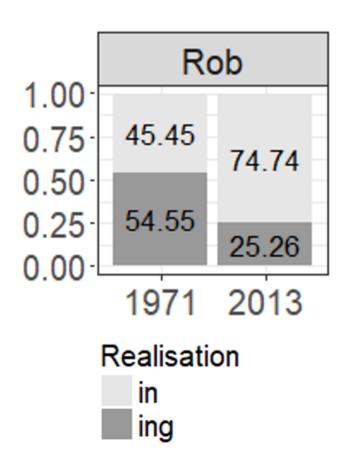
Rob $X^2(1) = 13.039, p < 0.001$

<u>Proportional distribution of variants</u>:

Increasing rates of vernacular nasal forms.

Pressures of the linguistic marketplace in middle age (Sankoff and Laberge 1978, Chambers 1990).

In 2013: Rob was three weeks from retirement "Retirement has ... important theoretical status in the variationist enterprise as a stage of life during which the prescriptive pressures of the linguistic marketplace abate" (Buchstaller et al. 2017:22).



Rob $X^2(1) = 13.039, p < 0.001$

<u>Proportional distribution of variants</u>:

Increasing rates of vernacular nasal forms.

Pressures of the linguistic marketplace in middle age (Sankoff and Laberge 1978, Chambers 1990).

Reversal to more vernacular forms as he approaches retirement (Buchstaller 2006; MacKenzie 2017).

Attitudes differ at different stages of his life

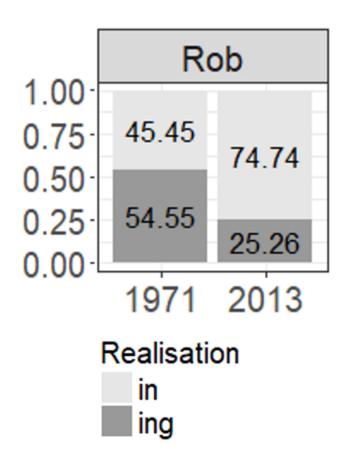
Rob, 1971:

Int: You ever change the way you speak according to the people you're speaking

to...?

Rob: Yeah, I think that sometimes you do. You know, [...] if you go into a shop

anywhere, you know, if you're away from home or down London.



Rob $X^2(1) = 13.039, p < 0.001$

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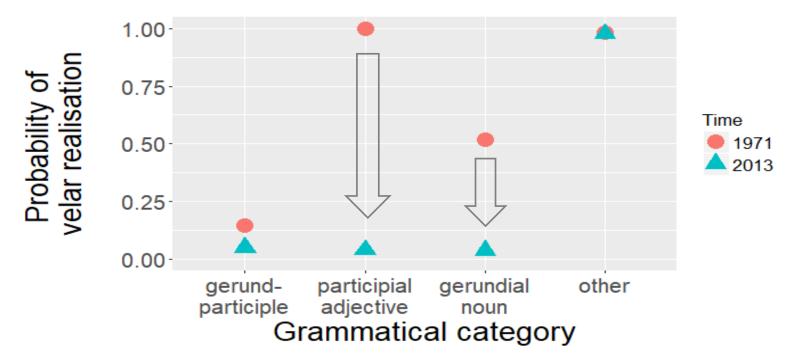
Rob, 2013:

Int: Did you have a telephone voice?

Rob: I would just **talk normally**, the way I am now. I'm not sort of putt[In] anything

on like I possibly did in the original interview.

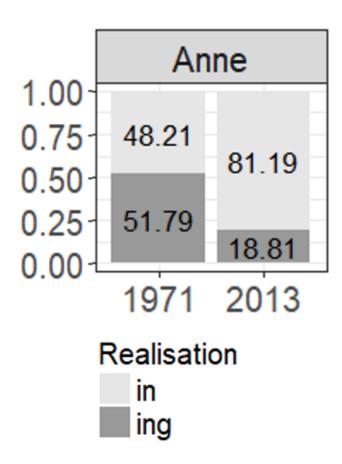
Rob



Interaction effect: reference level 1917:GC'ger.-part.' 2013:GC'ger. part' 0.1102 -1.186 -1.5972013:GC'ger.noun' 0.0681. -3.339-1.8242013:GC'part.adj' -5.334e+01 0.000 1.0000 2013:GC'other' -3.880e-01 -0.2090.8342

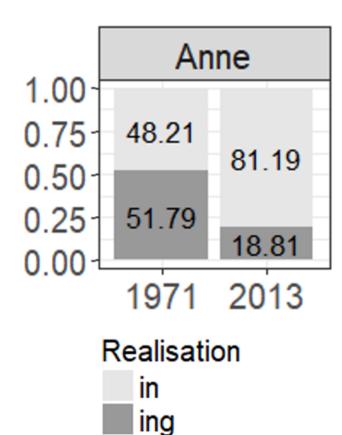
Results Rob

- proportional choices in the (ing) variable are unstable across time
- change in one predictor
 which conditions variable
 choices has changed across
 the two recordings.
- → Rob's variable grammar has changed.



Anne $X^2(1) = 23.111, p < 0.001$

<u>Proportional distribution of variants</u>: Increasing rates of vernacular nasal forms.



Anne $X^2(1) = 23.111, p < 0.001$

New Zealand English: "quite low frequencies [of alveolar variants] compared to other varieties" (Bell 2000: 236-37).

Why, then, have Anne's rates of vernacular nasals increased?

Strong positive attitudes towards her local accent

Anne, 2013:

Anne: I wouldn't lose my ((realized as 'me')) accent, no.

Int: No, but you didn't make any conscious attempt to? [...]

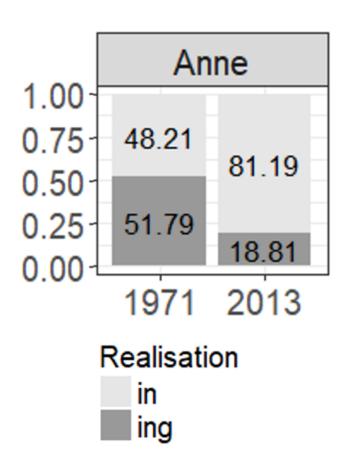
Anne: I'd slow down a little bit, you know. Just slow down a bit and that [...] And

yet most of the Kiwis loved the accent.

Int: did anyone there have difficulty understanding you? Your accent or your

dialect?

Anne: Yes, but they ended up talkin' Geordie.



Anne $X^2(1) = 23.111, p < 0.001$

New Zealand English: "quite low frequencies [of alveolar variants] compared to other varieties" (Bell 2000: 236-37).

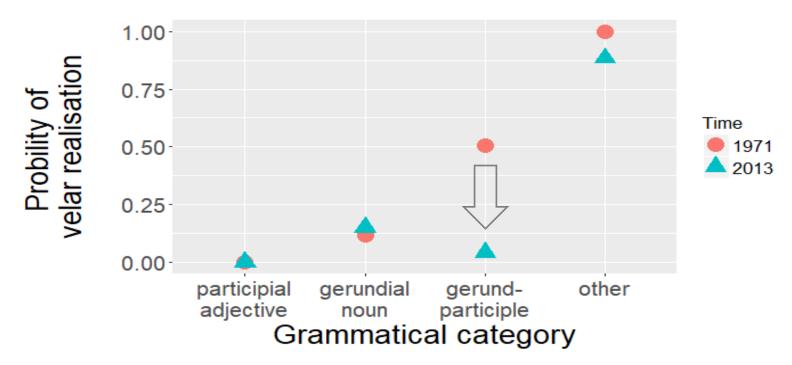
Why, then, have Anne's rates of vernacular nasals increased?

Strong positive attitudes towards her local accent

→ Anne's increased vernacularity not a reaction of marketplace pressures

BUT: Conscious assertion of her Geordie identity while abroad (and possibly also since she came back).

Anne



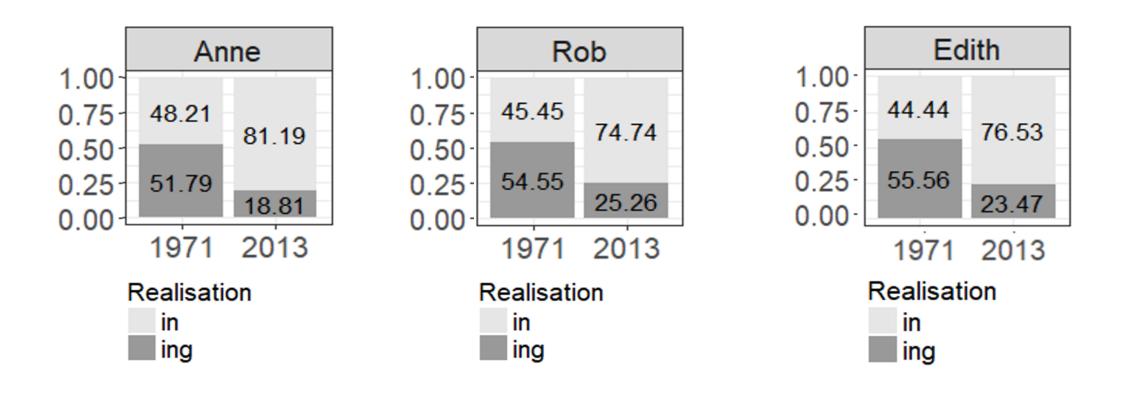
Interaction effect: 1917:GC'ger.-part.' 2013:GC'ger. noun' 2013:GC'part.adj' 2013:GC'other'

reference level 3.485 -1.801e+04 2.396e+01

2.543 0.0109 * 0.000 0.9998 0.000 0.9998

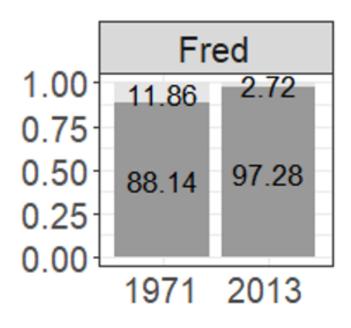
Results Anne

- proportional choices in the (ing) variable are unstable across time
- the effect of one predictor
 which conditions her variable
 has changed across the two
 recordings.
- → Anne's variable grammar has changed.



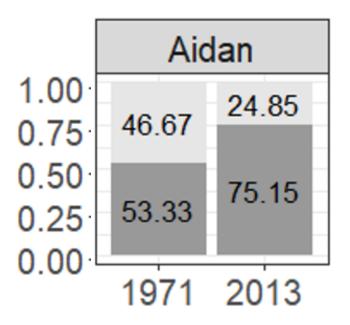
AND: Significant changes in constraint system

Social risers: Increase in standard



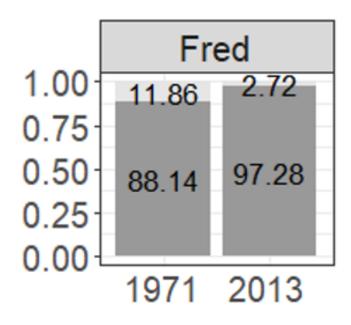
Int: What would you say about the way you're talking at the moment I mean the way you would talk to your wife for instance...?

Fred: **Except for the few ings** on the end of the words which she'd probably ... pick up them.



"I was a hairy-arsed welder. [...] And of course, being becoming a professional communicator ((laughter)), sounds a bit grandiose... I suppose subconsciously, not deliberately, subconsciously your attitude and your mode of speech does change."

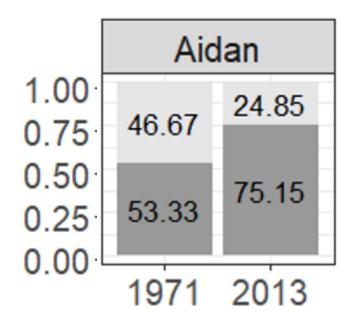
Social risers: Increase in standard



Fred $X^2(1) = 5.2719$, p < 0.05

Mixed-effects regression analysis: no significant interaction between predictors and the time of recording.

→ Fred's constraint system has remained stable



Aidan: $X^2(1) = 8.8516$, p < 0.01

Mixed-effects regression analysis: no significant interaction between predictors and the time of recording. → Aidan's constraint system has remained stable

Summary

Changes in the grammar as speakers move into old age?

Proportional distribution of variants:

- Stable MC speaker (Nelly) has remained stable across the life-span
- (Upper) working class speakers (Edith, Rob and Anne) have become more vernacular
- Upwardly mobile speakers (Fred and Aidan) have become more standard in-between middle adulthood and retirement.

= Individual mixed-effects regression analyses?

- Stable MC speaker: No significant interaction effects between individual predictors and the time of recording
- Stable WC speakers: significant interaction effects between individual predictors and the time of recording Rob and Anne: Time x preceding environment
 - Edith: Time x following environment'
- Upwardly mobile speakers:
 No significant interaction effects

Summary

Age-graded variability interpreted as result of normative pressures of the linguistic marketplace. Retrenchment towards conservative norms during early adulthood is well documented (Wagner 2012, Labov 2001)

BUT: Dearth of research on older age, when standardisation pressures are assumed to subside.

Our data expand the window of research into the linguistic (in)stability of the middle aged and older speaker. Panel-based support for age ranges that have thus far mainly been explored with apparent time evidence.

Two different trajectories after retirement:

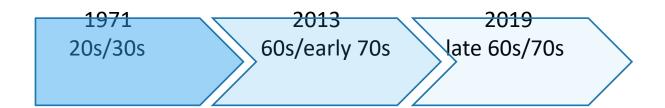
- "tail" for speakers past retirement: The three working class individuals illustrate the upward trajectory generally assumed in sociolinguistic theorising
- continued standardising effect of the sociolinguistic marketplace: The two socio-economic risers show continuing retrenchment towards the standard.

Summary

More research is needed to model linguistic malleability across the life-span for different types of variables (Sankoff 2019)

... and "more research is needed into the factors that diversify older adults sociolinguistically and determine their pathways for sociolinguistic development " (Pichler et al. 2018:13, Gerstenberg and Voeste 2015, the CLARe network).

→ Re-sampling of the six speakers into increasingly older age



To what extent to we find (and expect to find) orderly heterogeneity in older age? What are the structuring factors that govern linguistic choices in older age?



DE GRUYTER

Johanna Mechler and Isabelle Buchstaller*

[In]stability in the use of a stable variable

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Abstract: The relationship between community-wide change and patterns of variation and change within the individual is one of the cornerstones of variationist theorising. But while sociolinguistic theory makes clear and testable predictions regarding the use of stable vernacular features across the life-span of the individual, we lack real-time evidence on the age-graded nature of stable variability. Indeed, whereas apparent time research highlights the diachronic stability of (ing), only two research projects have explored its use within the individual speaker. Both report on pre-adult speakers. Our research expands the window of analysis by adding a later age-bracket to the investigation of age-graded variability. We consider the variable realisation of (ing) in a group of individuals between early adulthood and retirement.



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