

Emerging from below the social radar:

Evaluation of post-nasal [ŋ] in the
North West of England

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ŋg

Social meaning

- Foundational conceptualisation of the speech community:
 - “Regardless of the linguistic differences among them, the speech varieties employed within a speech community form a system because they are related to a shared set of social norms” (Gumperz 1964)
 - “The speech community is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms” (Labov 1972)
- Important to supplement production data with studies investigating social meaning and the indexicality of variable linguistic features
 - **ING** - Trudgill (1972) on production; Campbell-Kibler (2011) on perception
 - **TH-fronting** - Baranowski & Turton (2015) on production; Levon & Fox (2014) on perception
 - **T-glottalling** - Straw & Patrick (2007) on production; Schleeef (2017) on perception

Post-nasal [g]

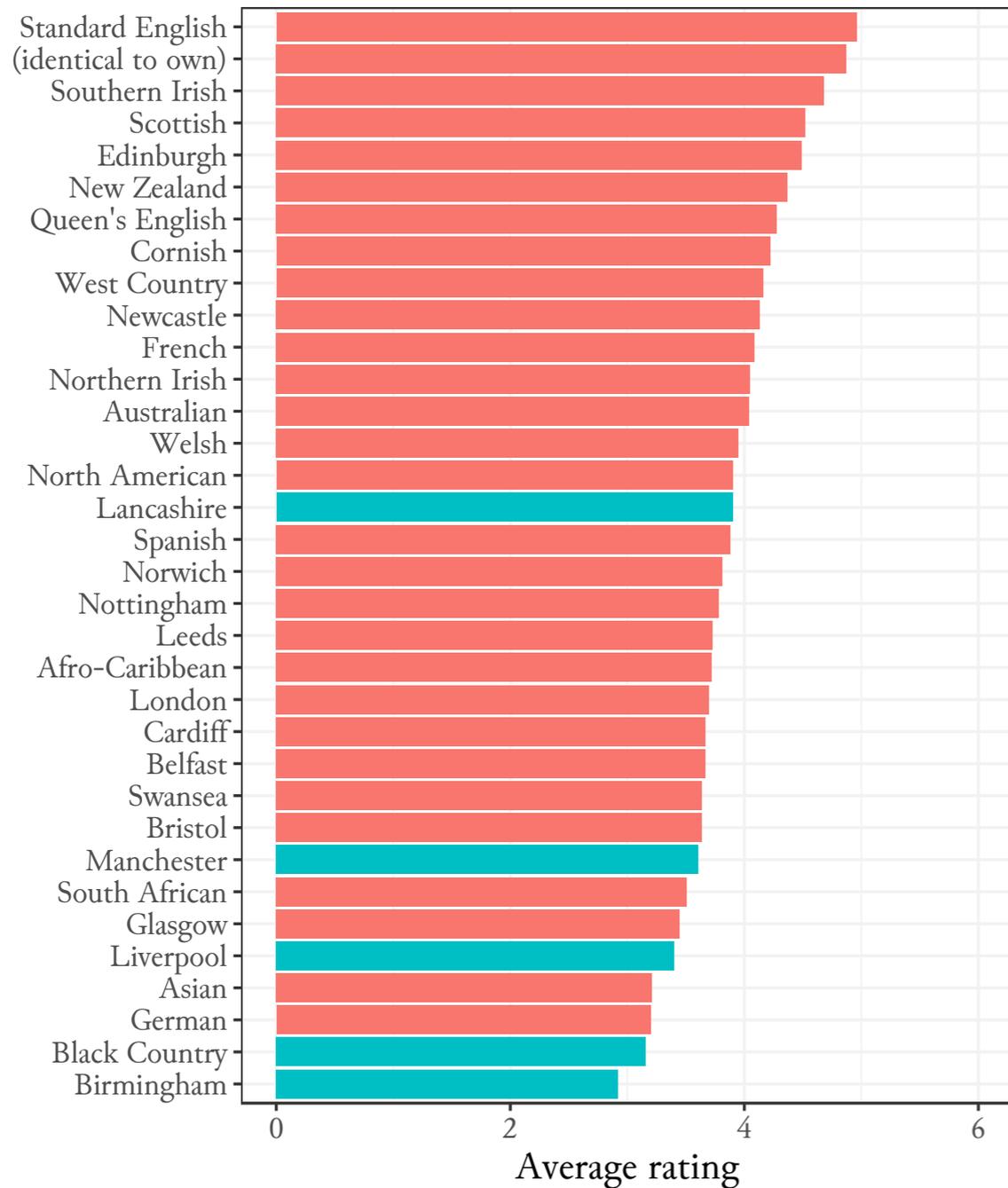
- Variable presence of post-nasal [g] in words like *sing*, *wrong*, *hanger* etc.
 - *sing* [sɪŋg]~[sɪŋ] *wrong* [ɹɒŋg]~[ɹɒŋ] *hanger* [hæŋgə]~[hæŋə]
- Characteristic feature of the North West and West Midlands of England (Wells 1982; Trudgill 1999; Hughes et al. 2012; MacKenzie et al. 2018)
- Notated using (ng)
 - **important**: different from (ing)
 - even though [g] can also be present as a realisation of unstressed *-ing*, the two environments behave very differently and should be treated separately

Motivations for the study

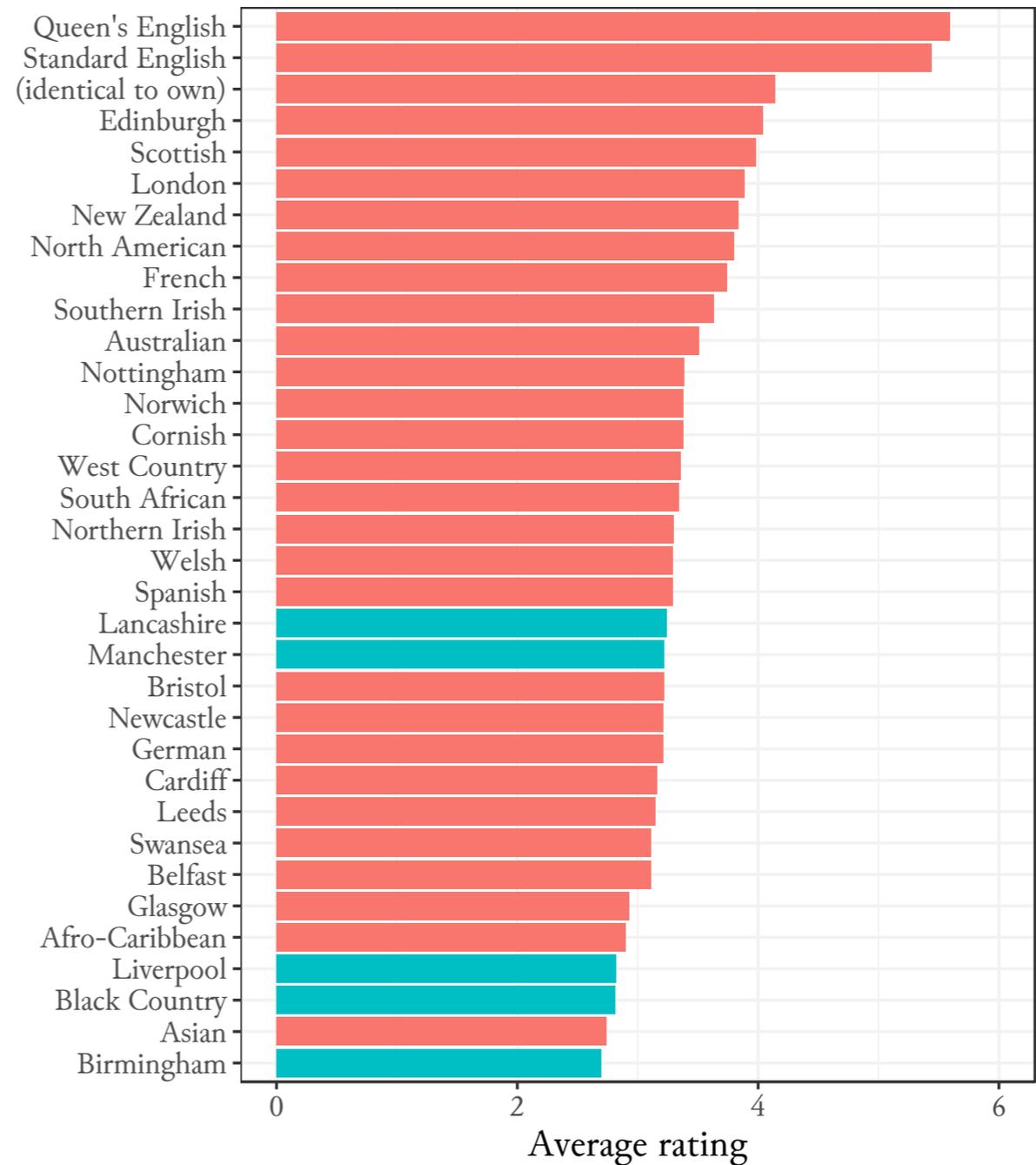
- Studies such as Coupland & Bishop (2007) reveal listener attitudes towards regional varieties...
 - ▶ e.g. Irish rated 3rd for social attractiveness (cf. Newcastle 10th; Birmingham 34th)
- ...but we know relatively little about the exact features in each variety that contribute to these attitudes, or at least to the salience of that dialect
 - ▶ one solution: collect real-time reaction data (see Montgomery & Moore *forthcoming*)
 - ▶ alternatively: conduct matched-guise studies of individual features

Haters gonna hate

Social attractiveness



Prestige



(ng) variety
no
yes

Motivations for the study

- (ng) is an interesting case study of social meaning for a number of reasons:
 1. rare case of a regional variant being favoured in more formal speech styles (Mathisen 1999; Bailey 2015)
 - based on this, [ŋg] claimed to be locally prestigious (Beal 2008)
 2. [g]-presence is diachronically conservative and reflected in orthography
 - [ŋg] once present in all varieties before undergoing widespread deletion (Bermúdez-Otero & Trousdale 2012)
 3. conflicting reports regarding its social profile
 - [ŋg] favoured by working classes (Watts 2005)
 - but equally: “not perceived as a crashing local-accent feature which ambitious upwardly-mobile northerners might want to try to modify or eliminate” (Wells 1997: 43)

Methodology

Experimental paradigm

- Matched-guise approach, using the ‘newscaster’ paradigm (e.g. Labov et al. 2006, 2011)
 - subjects told that the speaker is auditioning for a role as a news presenter - shown to prime overt sociolinguistic norms
 - particularly applicable in Northern English contexts - see linguistic prejudice against the BBC’s Steph McGovern as well as in other professional contexts, e.g. teaching (Baratta 2017)

Yes, people *still* discriminate against northern accents

BBC Breakfast presenter Steph McGovern sent £20 by viewer to correct her 'terrible' northern accent

Steph said she received a letter from someone so outraged by her 'affliction' that they offered to pay for her to have 'correction therapy'

BBC Breakfast's Stephanie McGovern: They said I was too northern for TV but I won't change my accent

From a working class childhood, she went to work at 18 and then studied science at university while doing three jobs

Does having a northern accent make you sound thick? Angela Rayner hits back at trolls

Angela Rayner, MP for Ashton-under-Lyne in Tameside, has complained that she has been receiving a barrage of abuse from online trolls whenever she appears on TV and radio interviews

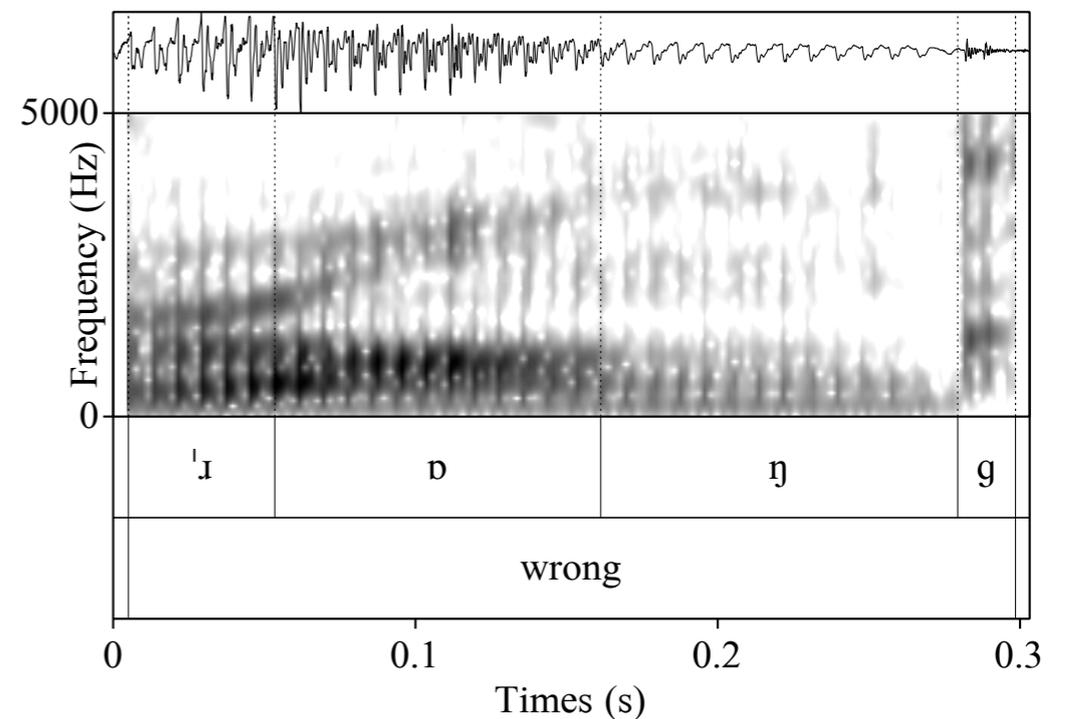
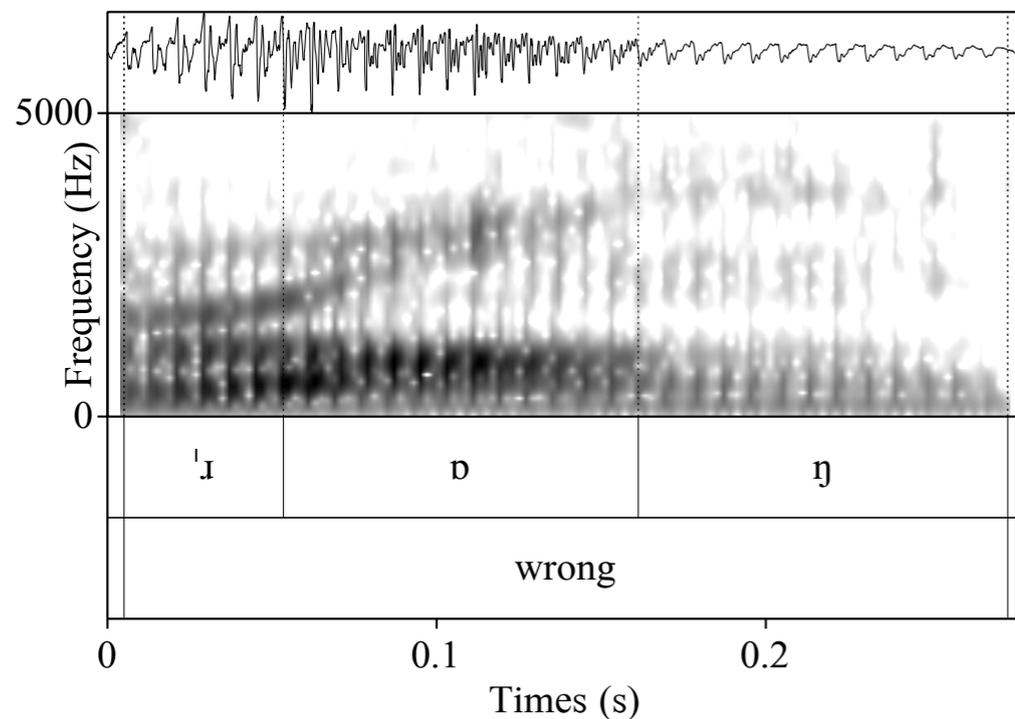
Angela Rayner Called 'Thick As Mince' In Abusive Emails About Her Accent

Snobbery allegedly comes from within Labour too.

Teachers with Northern accents are being told to 'posh up', here's why

Matched-guise technique

- Each recording contains two headlines and two tokens of (ng)
- Each passage read out once with [g]-presence, once with [g]-absence, by a 56 year-old female speaker of Manchester English
- Recordings cross-spliced in Praat so that the two passages are identical except for [g]-presence/absence
 - any differences in how they are evaluated can be attributed to the variable presence of post-nasal [g]



Matched-guise technique

'Difference score' calculated for each pair of guises:

In other news, weather experts warn that increased levels of global warming have led to the highest temperatures ever recorded in Spri**[ηg]**.

In other news, weather experts warn that increased levels of global warming have led to the highest temperatures ever recorded in Spri**[η]**.

Rating of [ηg] passage

subtracted by

Rating of [η] passage

positive value indicates
higher rating for [g] guise

value of 0 indicates no
difference in rating

negative value indicates
lower rating for [g] guise

Rating scales

- Subjects rated each recording on 4 7-point Likert scales:
 - ▶ **professionalism, education, and formality**
 - measures of overt prestige (e.g. Labov et al. 2006, 2011; Levon & Fox 2014; Schleeef et al. 2015)
 - ▶ **northernness**
 - to gauge the salience of (ng) as a characteristic feature of northern dialects

Stimuli

Three headline groups containing tokens of (ng) in different phonological environments

- **Word-final pre-consonantal**

- ▶ strongly [g]-**disfavouring** in speech production (Knowles 1973; Watts 2005; Bailey 2015)
- ▶ e.g. *The government is demanding that zoos increase security after the latest incident saw an escaped gorilla attack a young**ng** child.*

- **Word-medial pre-vocalic**

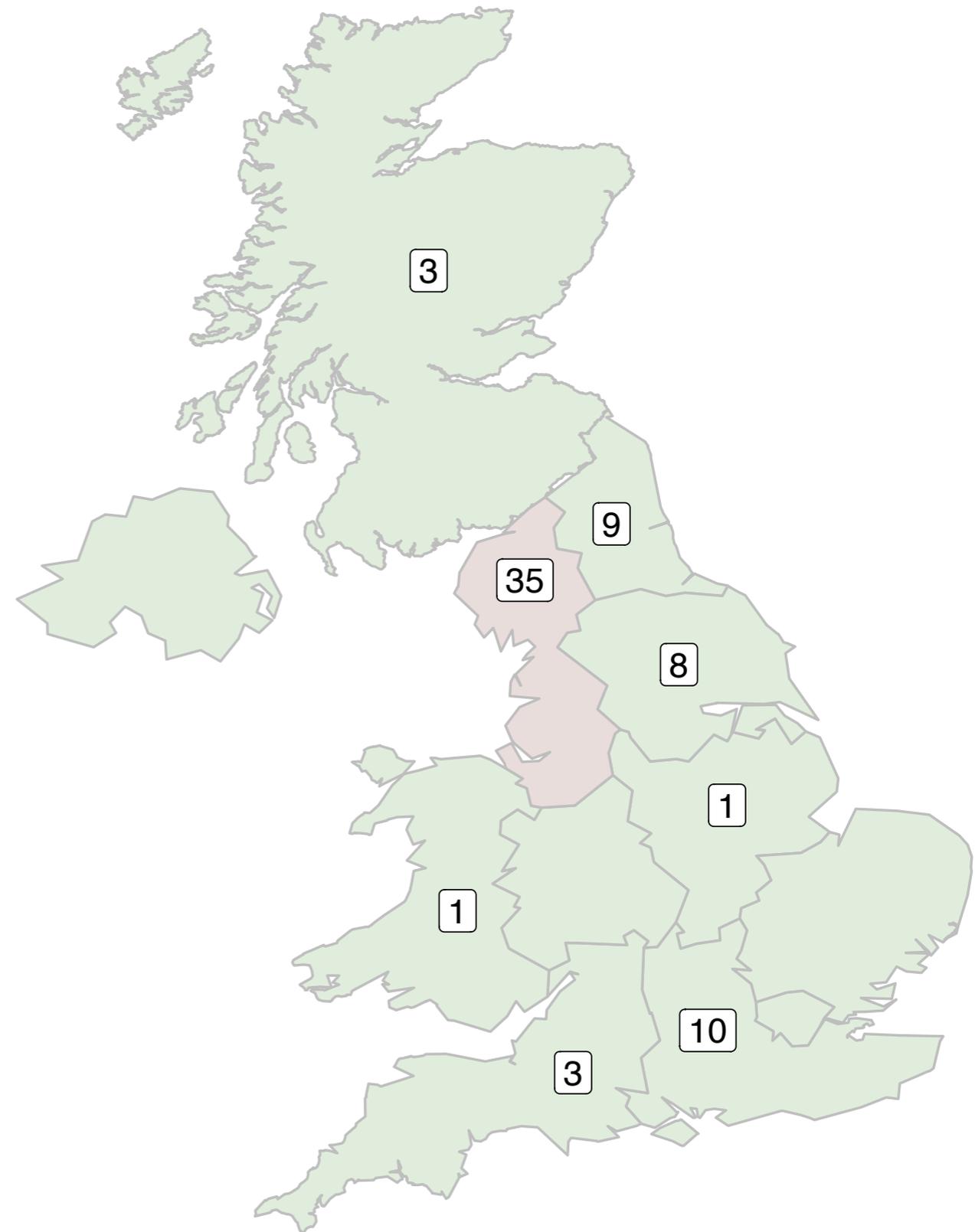
- ▶ strongly [g]-**favouring** in speech production (Knowles 1973; Watts 2005; Bailey 2015)
- ▶ e.g. *In sport, Liverpool today dropped more points in the absence of their star player Sadio Mané, leading to claims that the club are too reliant on the right wing**er**.*

- **Phrase-final**

- ▶ change in progress: increasingly [g]-favouring over time (Bailey *submitted*)
- ▶ e.g. *Scientists working on the Large Hadron Collider have today found new evidence that reveals what the universe was like at the time of the Big Bang**ng**.*

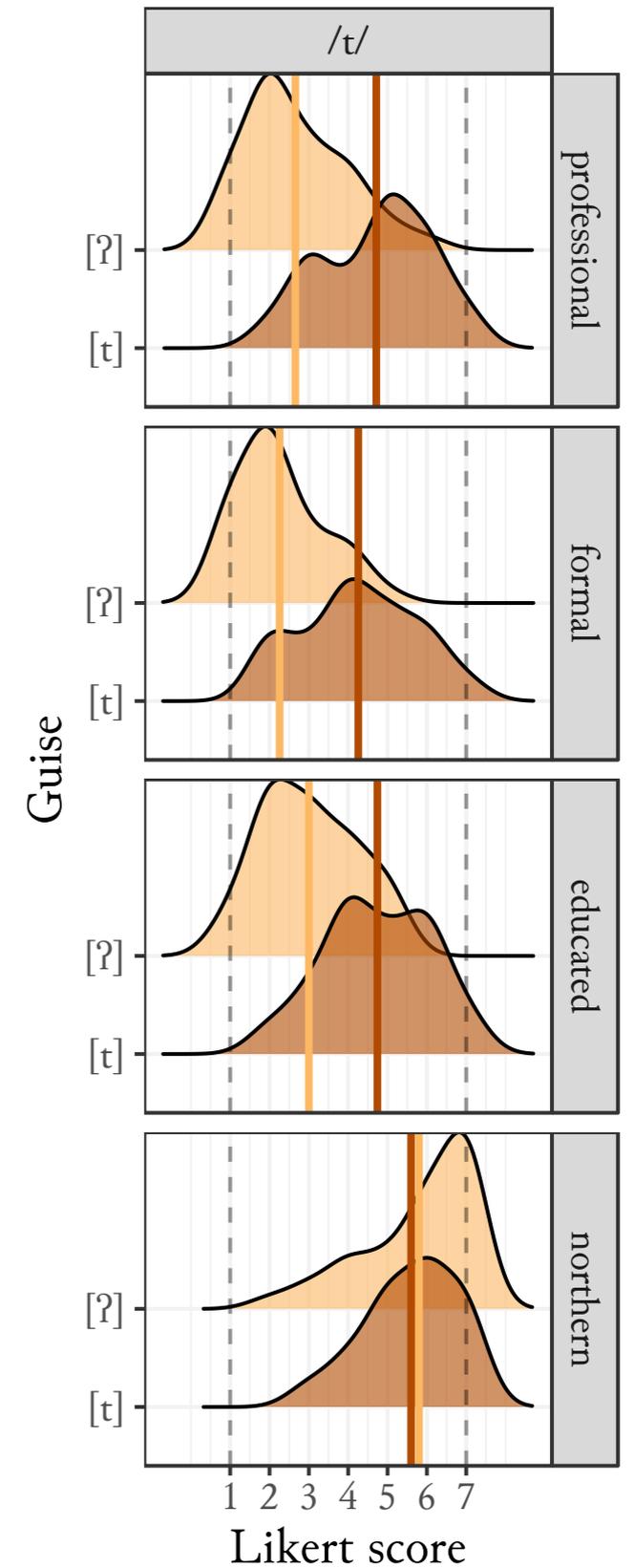
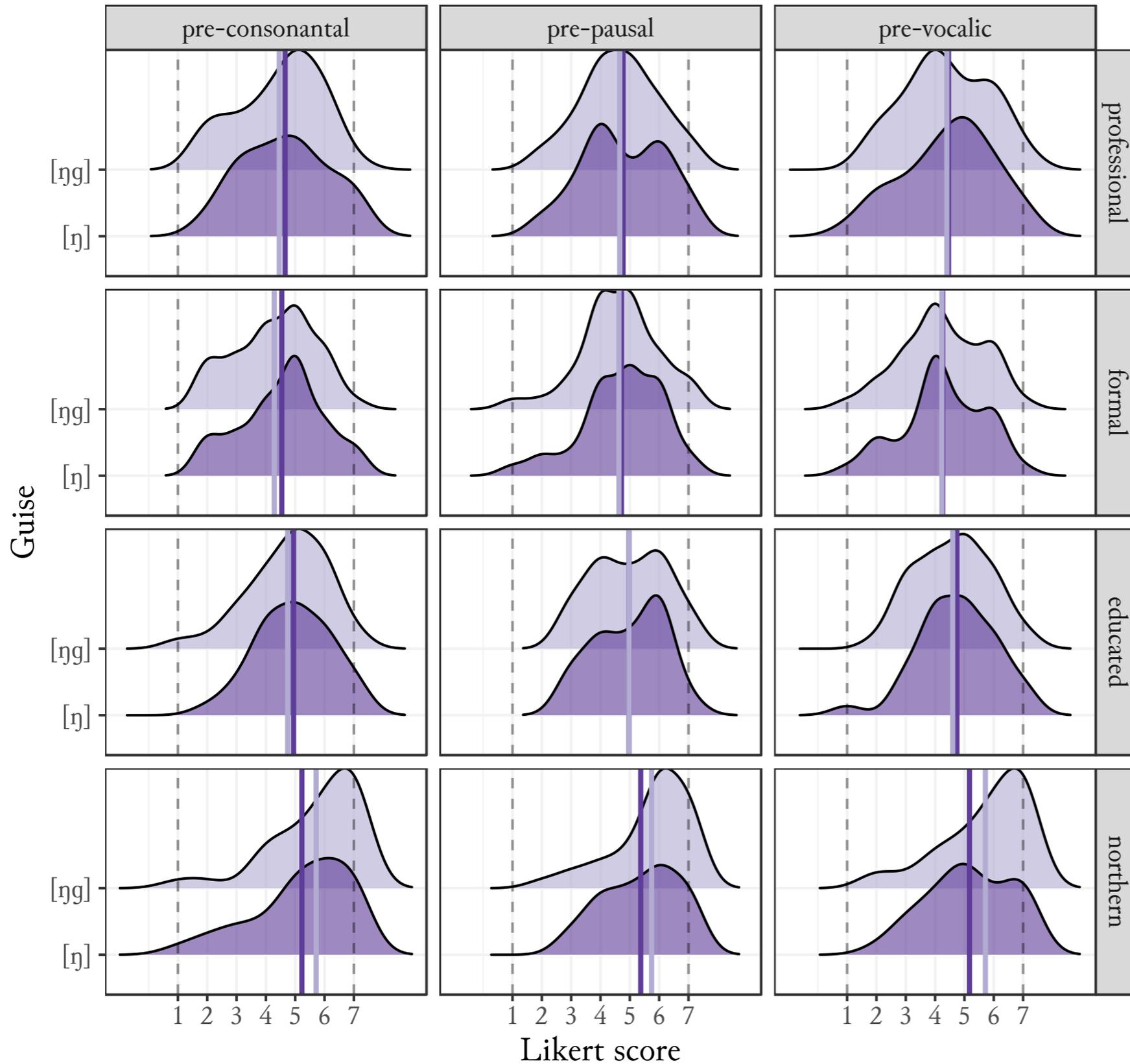
Subjects

- Survey distributed online and completed by 71 subjects
- 35 North West ~ 36 elsewhere
- Analysis today focused on subjects from the North West
- 17 young (aged 19-27, $\sigma = 23$),
18 old (aged 30-73, $\sigma = 57$)



Results

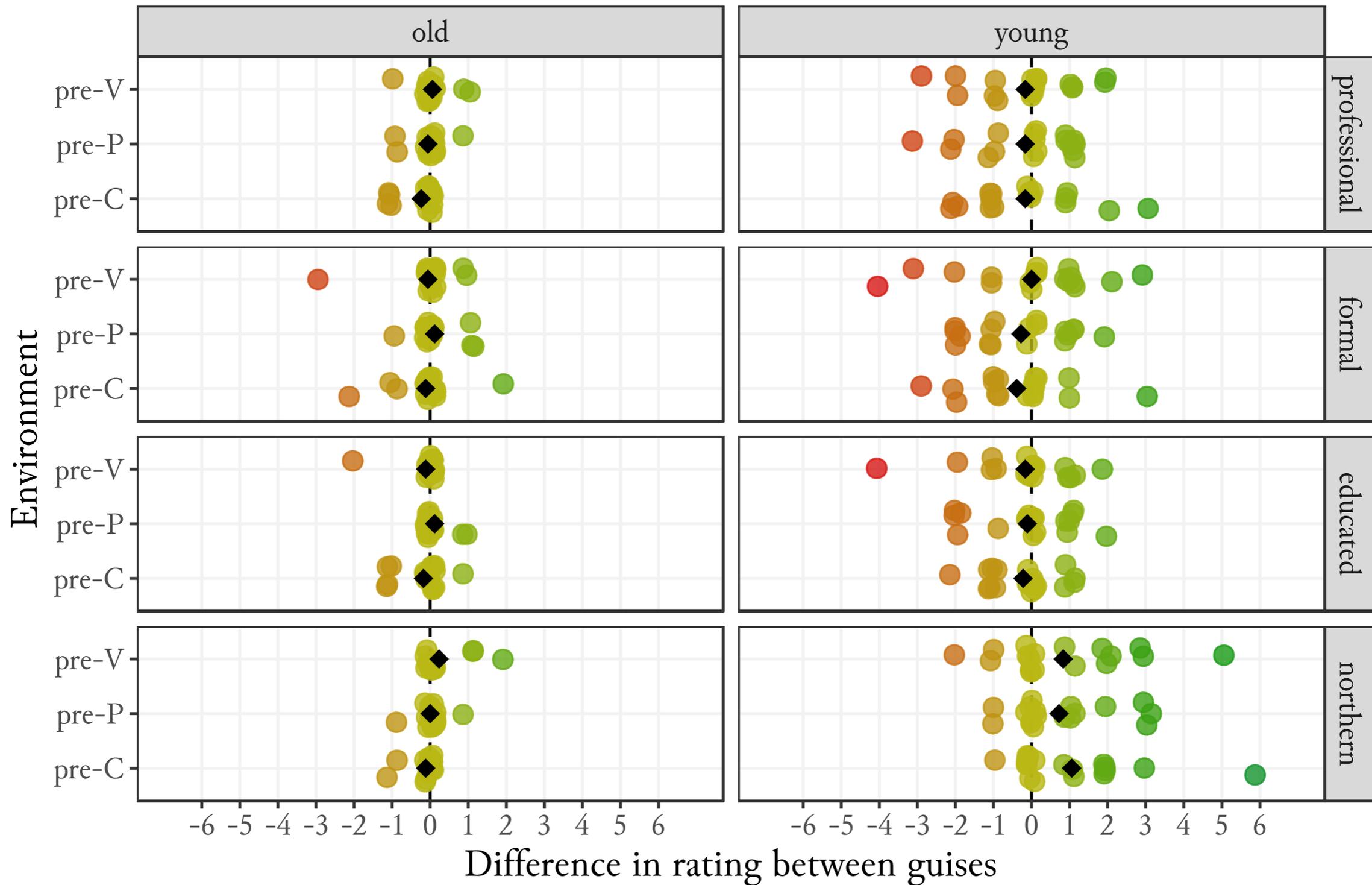
Absolute ratings



Absolute ratings

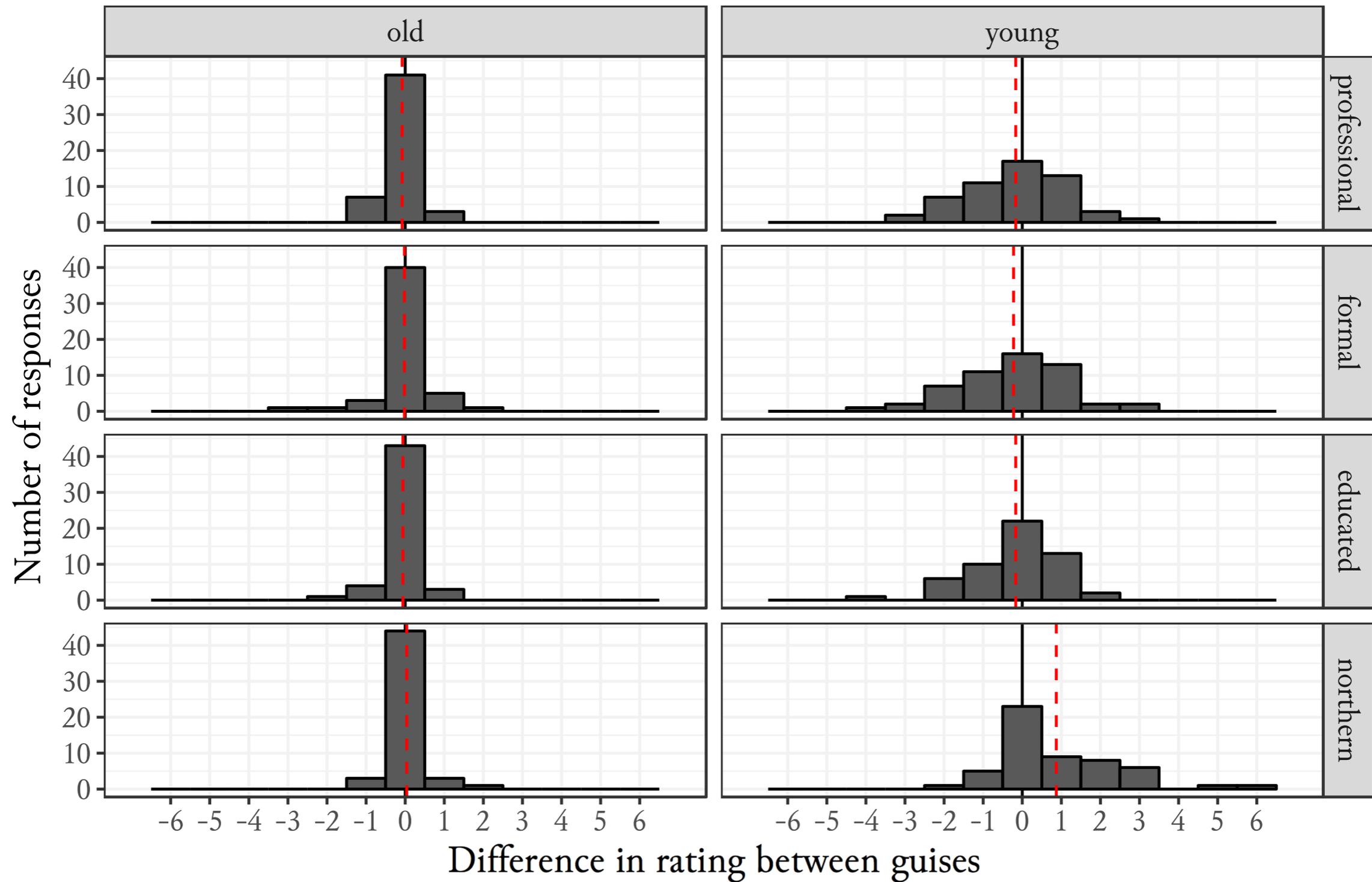
- Results seem to indicate that (ng) is not socially salient enough to elicit strong reactions
 - average rating of [ŋg] not significantly different from the average rating of [ŋ]
- But what happens when:
 - a. old and young age groups are considered separately?
 - b. 'difference scores' are used - rather than absolute ratings - for greater insight at the level of the individual?

Difference scores



← higher rating for [ŋ] | higher rating for [ŋg] →

Difference scores



← higher rating for [ŋ]

higher rating for [ŋg] →

Mixed-effects linear regression

- To test the significance of these effects, two mixed-effects linear regression models were fit to the data using `lme4` in R:
- **northern** difference scores - to test the increase in value
- **professional** difference scores - to test the increase in *variation*
 - ▶ in this case, only the magnitude of the $[\eta g] \sim [\eta]$ difference score is important, so the polarity was removed
 - ▶ i.e. the model doesn't distinguish between **-3** ($[\eta]$ more professional than $[\eta g]$) and **+3** ($[\eta g]$ more professional than $[\eta]$)
 - ▶ in both cases, the magnitude of the difference (deviance from neutrality) is the same
- Both models include fixed effects of *age group*, *environment*, and their interaction
- Plus a random intercept of *subject* due to the within-subjects design

Mixed-effects linear regression

- Results indicate a significant effect of *age group* in both models
 - for **professional** difference scores: $\beta = 0.82$, $p < 0.001$
 - for **northern** difference scores: $\beta = 1.17$, $p = 0.004$
- There is no significant effect of *environment*, nor a significant interaction between *age group* and *environment*
 - the evaluation of [g]-presence - in particular this change in evaluation across generations - is uniform across all environments

Discussion

Salience and indexicality

- Two important aspects of this difference between young and old subjects (assuming an apparent time hypothesis):
 1. Increased sensitivity to the dialectal status of [ŋg] over time
 - ... which means (ng) is more accessible to evaluation, but...
 2. The content of evaluation among young subjects is highly variable

Salience

1. Increased sensitivity to the dialectal status of [ŋg]

- Salience crucial to the ‘sociolinguistic monitor’ - the cognitive mechanism that gives rise to social meaning and language evaluation (Labov et al. 2006, 2011)
- No change in (ng)’s phonetic salience but possible change in its *social* salience
 - “the relative ability of a linguistic variant to evoke social meaning” (Levon & Fox 2014: 193)
- Could arise through increased mobility and therefore more contact with non-northern speakers
- Or through increased rates of [g]-presence in production - makes speakers more aware of its absence among their non-northern peers

Indexicality

2. Content of evaluation among young subjects is highly variable

- Increased sensitivity to the northern status of [ŋg], but no agreement on *what* this meaning should be
- Subjects who rate [ŋg] as **less** professional than [ŋ]:
 - negative social meaning arises through second-order indexicality with northernness (Silverstein 2003) and the fact that an RP-norm still pervades English professional contexts
- Subjects who rate [ŋg] as **more** professional than [ŋ]:
 - orthographic influence? [g]-presence more closely reflects the orthography where <g> is also present
 - generalisation that lenition output is stigmatised (e.g. /h/-dropping, /td/-deletion, /t/-glottalling etc.) - prescriptivist notion that dropping sounds is characteristic of 'lazy' speech
 - association between: WL style <> citation form <> clear speech <> 'correctness'

Language regard (Preston 2010, 2011)

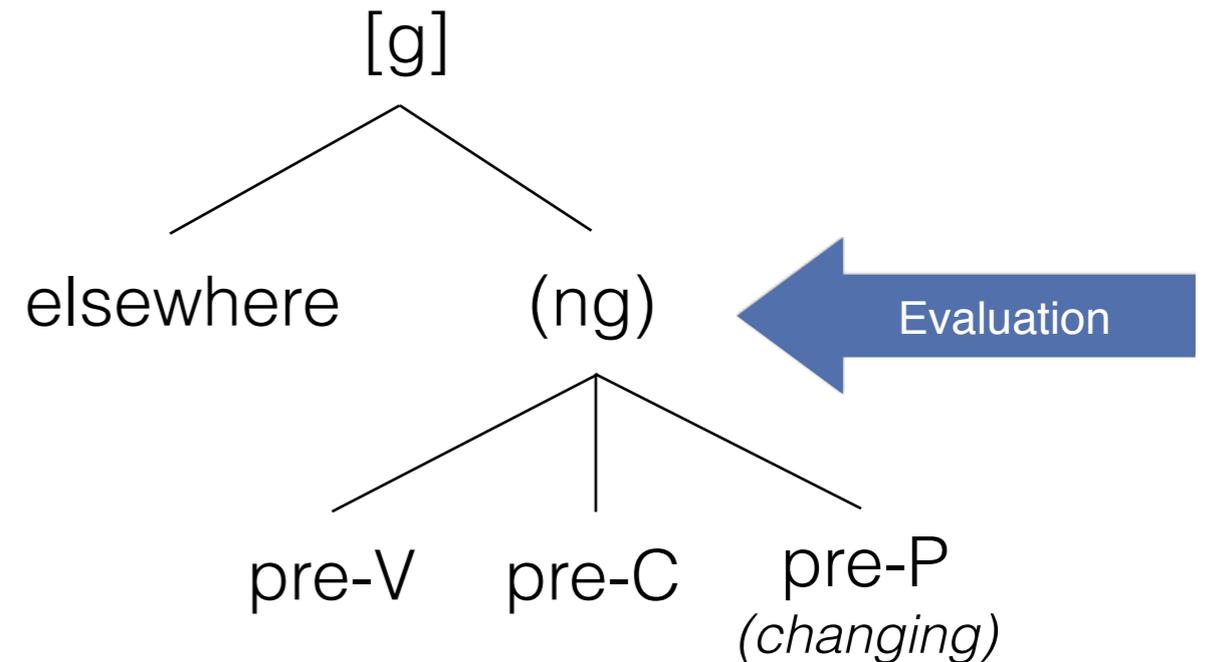
- Preston (2010, 2011) outlines the cognitive mechanisms that give rise to social meaning as a four-step process:
 1. **noticing**: listeners must first **notice** the variant...
 2. **classifying**: then **classify** it as belonging to a particular regional variety, social group, or register of speech based on past experience...
 3. **imbuing**: then **imbue** the form with social meaning according to the characteristics they associate with the groups/styles in (2)...
 4. **reacting**
- The results here point to inter-speaker variation at two of these stages:
 - older subjects are less likely to **notice** the form, or if they do, are less likely to **classify** it with northern varieties of BrE
 - variation among younger subjects with respect to the meanings imbued at stage 3

Granularity of social meaning

- No significant effect of *environment*, or interaction between *environment* and *age group*
- The overall alternation between [ŋ]~[ŋg] has accrued social meaning over time
 - but this isn't concentrated on a particular environment
 - despite the fact that a change is taking place in pre-pausal contexts
- Suggests that this change isn't evaluation-driven - **progressing fully below the radar**

Granularity of social meaning

- What objects of linguistic variation are subject to evaluation?
- Eckert & Labov (2017):
 - evaluation attaches to the realisations of individual phonological units
 - not to more abstract components of linguistic variation, e.g. chain shifts
- Finds support from (ng):
 - the concrete phonetic element - alternation between [ŋ]~[ŋg] - is beginning to accrue social meaning
 - but the more fine-grained change conditioned by pause/prosody is not
- Evaluation attaches at an intermediate level of granularity



Conclusions

- Earlier claims that [g]-presence is locally prestigious - based primarily on stylistic stratification - are way off the mark
 - high word-list [g]-presence likely to reflect prosody rather than formality
- (ng) seems to be a case of incipient social meaning
 - north westerners are increasingly aware of [ŋg] and its status as a feature of the local dialect
 - but this does not yet translate to uniform evaluation across the speech community
- Does it reflect inter-speaker variation with respect to norm orientation? Knowles (1978) describes (ng) as a ‘conflict of local and national norms’
 - some subjects aligning with local norms, others with national norms?
 - cf. the traditional formalisation of the ‘speech community’ in adhering to a set of shared social norms (Gumperz 1964; Labov 1972)
- Or a more general trend — as reported by Coupland & Bishop (2007) — towards decreasing stigma of northern accents more generally?

Future work

- Is this a characteristic feature of incipient social meaning more generally?
- Or does it only occur in cases where antagonistic forces promote both variants in an alternation?
- Return to this variable in the future for a longitudinal analysis
 - with time, will north westerners settle on a shared norm with respect to (ng)?

References

- Bailey, George. 2015. Social and internal constraints on (ing) in northern Englishes. Master's dissertation, University of Manchester.
- Bailey, George. submitted. Ki(ng) in the north: Effects of duration, boundary and pause on [g]-presence.
- Baranowski, Maciej and Danielle Turton. 2015. Manchester English. In Raymond Hickey (ed.) *Researching Northern English*, Amsterdam: John Benjamins. 293–316.
- Baratta, Alex. 2017. Accent and linguistic prejudice within British teacher training. *Journal of Language, Identity & Education* 16: 416–423.
- Beal, Joan C. 2008. English dialects in the north of England: Phonology. In Bernd Kortmann and Clive Upton (eds.) *Varieties of English. Vol. 1: The British Isles*, Berlin: Mouton de Gruyter. 122–144.
- Bermúdez-Otero, Ricardo & Graeme Trousdale. 2012. Cycles and continua: On unidirectionality and gradualness in language change. In T. Nevalainen and E. C. Traugott (eds.) *The Oxford handbook of the history of English*, New York: Oxford University Press. 691–720.
- Campbell-Kibler, Kathryn. 2011. The sociolinguistic variant as a carrier of social meaning. *Language Variation and Change* 22: 423–441.
- Coupland, Nikolas and Hywel Bishop. 2007. Ideologised values for British accents. *Journal of Sociolinguistics* 11: 74–93.
- Eckert, Penelope. 2008. Variation and the indexical field. *Journal of Sociolinguistics* 12: 453–476.
- Eckert, Penelope and William Labov. 2017. Phonetics, phonology and social meaning. *Journal of Sociolinguistics* 21: 467–496.
- Fabricius, Anne. 2000. T-glottalling: Between stigma and prestige. A sociolinguistic study of modern RP. Doctoral dissertation, Copenhagen Business School.
- Gumperz, John J. 1968. The speech community. In David L Sills (ed.) *International encyclopedia of the social sciences*, New York: Macmillan. 381–386.
- Hughes, Arthur, Peter Trudgill, and Dominic Watt. 2012. *English accents and dialects*. London: Routledge.
- Knowles, G. (1973). Scouse: The urban dialect of Liverpool. Doctoral dissertation, University of Leeds.
- Knowles, Gerald. 1978. The nature of phonological variables in Scouse. In Peter Trudgill (ed.) *Sociolinguistic patterns in British English*, London: Arnold. 80–90.
- Labov, William. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, William, Sharon Ash, Maciej Baranowski, Naomi Nagy and Maya Ravindranath. 2006. Listeners' sensitivity to the frequency of sociolinguistic variables. *U. Penn Working Papers in Linguistics* 12: 105–129.
- Labov, William, Sharon Ash, Maya Ravindranath, Tracey Weldon, Maciej Baranowski and Naomi Nagy. 2011. Properties of the sociolinguistic monitor. *Journal of Sociolinguistics* 15: 431–463.
- Levon, Erez and Sue Fox. 2014. Social Saliency and the Sociolinguistic Monitor: A Case Study of ING and TH-fronting in Britain. *Journal of English Linguistics* 42: 185–217.
- MacKenzie, Laurel, George Bailey and Danielle Turton. 2018. Our dialects: Mapping variation in English in the UK. Available at: <<http://projects.alc.manchester.ac.uk/ukdialectmaps/>>.
- Mathisen, Anne G. 1999. Sandwell, West Midlands: Ambiguous perspectives on gender patterns and models of change. In Paul Folks and Gerard Docherty (eds.) *Urban voices: Studies in the British Isles*, London: Arnold. 107–123.
- Montgomery, Chris and Emma Moore. Forthcoming. Evaluating S(cilly) Voices: The effects of saliency, stereotypes, and co-present language variables on real-time reactions to regional speech. *Language*.
- Newbrook, Mark. 1999. West Wirral: Norms, self reports and usage. In Paul Foulkes and Gerard Docherty (eds.) *Urban voices: Studies in the British Isles*, London: Arnold. 90–106.
- Preston, Dennis R. 2010. Language, people, saliency, space: Perceptual dialectology and language regard. *Dialectologia* 5: 87–131.
- Preston, Dennis R. 2011. The power of language regard: Discrimination, classification, comprehension, and production. *Dialectologia* : 9–33.
- Schleef, Erik, Nicholas Flynn and Michael Ramsammy. 2015. Production and perception of (ing) in Manchester English. In E. Torgersen, S. Hårstad, B. Mæhlum and U. Røyneland (eds.) *Selected papers from the Seventh International Conference on Language Variation in Europe (ICLaVE 7)*, Amsterdam: John Benjamins. 197–210.
- Schleef, Erik, Nicholas Flynn and Will Barras. 2017. Regional diversity in social perceptions of (ing). *Language Variation and Change* 29: 29–56.
- Silverstein, Michael. 2003. Indexical order and the dialectics of sociolinguistic life. *Language & Communication* 23: 193–229.
- Straw, Michelle and Peter L Patrick. 2007. Dialect acquisition of glottal variation in /t/: Barbadians in Ipswich. *Language Sciences* 29: 385–407.
- Trudgill, Peter. 1972. Sex, covert prestige and linguistic change in the urban British English of Norwich. *Language in Society* 1: 179–195.
- Trudgill, Peter. 1999. *The dialects of England*. Oxford: Blackwell.
- Watts, Emma. 2005. Mobility-induced dialect contact: A sociolinguistic investigation of speech variation in Wilmslow, Cheshire. Doctoral dissertation, University of Essex.
- Wells, John C. 1982. *Accents of English vol. 2: The British Isles*. Cambridge: Cambridge University Press.
- Wells, John C. 1997. Our changing pronunciation. *Transactions of the Yorkshire Dialect Society* XIX: 42–48.

Thanks for listening!

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 @grbails

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Mixed-effects linear regression

(a): professional	Estimate	Std. Error	Estimated df	t-value	p-value	
Intercept	0.2353	0.1656	88	1.4213	0.1589	
Age group						
<i>young</i>	0.8203	0.2309	88	3.5532	<0.001	***
Environment						
<i>pre-pausal</i>	-0.1176	0.2028	66	-0.5802	0.5633	
<i>pre-vocalic</i>	-0.0588	0.2028	66	-0.2901	0.7724	
Age x Environment						
<i>young:pre-pausal</i>	0.0065	0.2828	66	0.0231	0.9816	
<i>young:pre-vocalic</i>	-0.0523	0.2828	66	-0.1849	0.8537	

(b): northern	Estimate	Std. Error	Estimated df	t-value	p-value	
Intercept	-0.1176	0.2799	64	-0.4203	0.6754	
Age group						
<i>young</i>	1.1732	0.3903	64	3.0056	0.0035	**
Environment						
<i>pre-pausal</i>	0.1176	0.2732	66	0.4307	0.6678	
<i>pre-vocalic</i>	0.3529	0.2732	66	1.2920	0.1999	
Age x Environment						
<i>young:pre-pausal</i>	-0.4510	0.3809	66	-1.1839	0.2398	
<i>young:pre-vocalic</i>	-0.5752	0.3809	66	-1.5099	0.1349	