

**When sound change isn't  
led by social change:**

**The case of Northern English (ng)**

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Production



Perception

The role of sociolinguistic evaluation in language change

- Social meaning plays a central role in the third wave of the variationist paradigm
  - “The emphasis on stylistic practice in the third wave places speakers not as passive and stable carriers of dialect, but as stylistic agents, tailoring linguistic styles in ongoing and lifelong projects of self-construction and differentiation”  
(Eckert 2012: 97-98)
- Indexicality of linguistic variants influences synchronic variation through local acts of identity construction:
  - ▶ the use of traditional /ay/ variants by inhabitants of Martha’s Vineyard to signal island identity in the face of increasing tourism (Labov 1963)
  - ▶ the use of negative concord (among other features) by burnouts of a Detroit high school to index a rebellious style (Eckert 2000)
  - ▶ the use of full tone and avoidance of traditional/local variants by Beijing yuppies to construct a ‘cosmopolitan’ persona (Zhang 2005)

- But what is the role of social meaning in the propagation and incrementation of sound change?

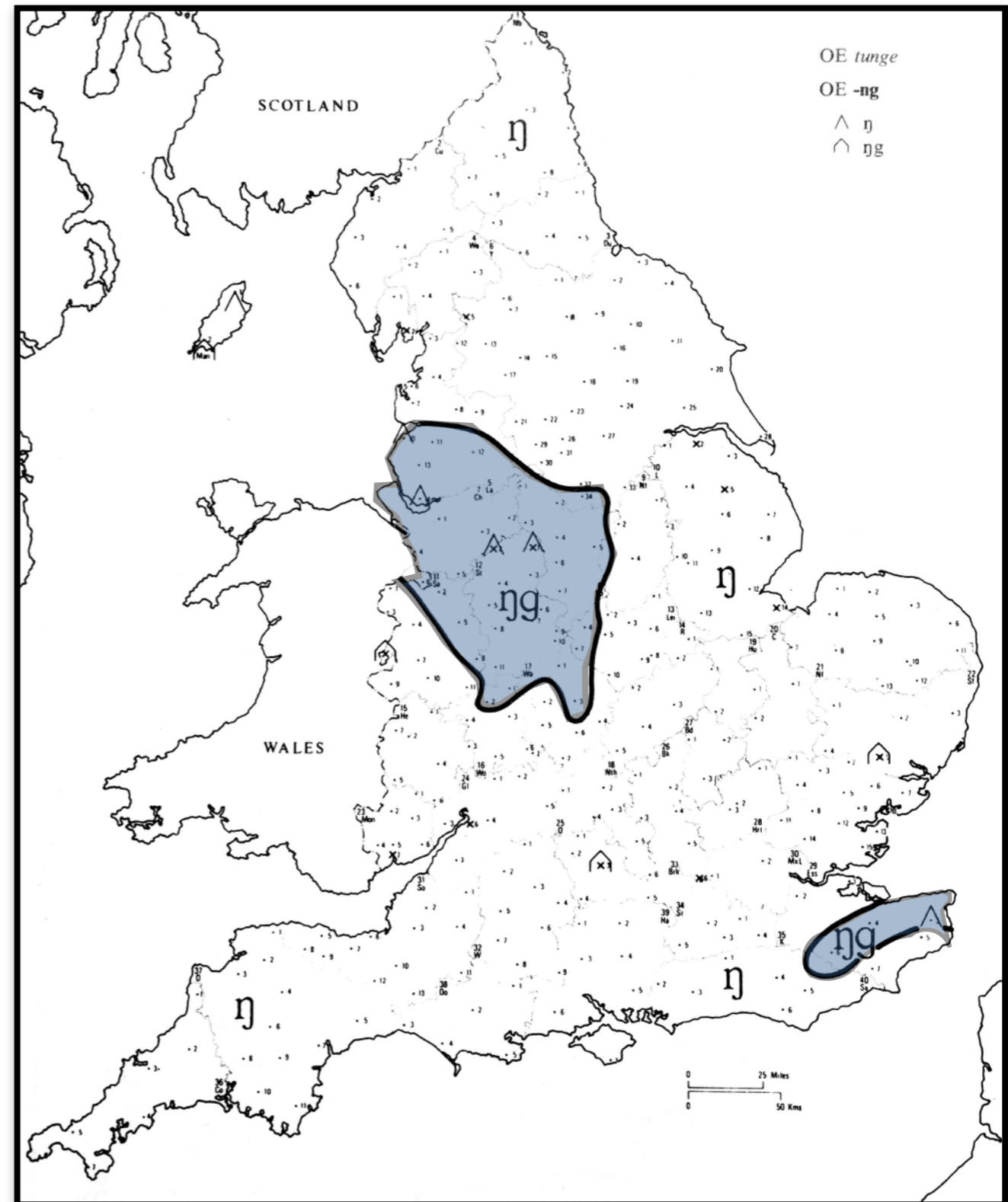
“phonological change is frequently motivated and accelerated by the association of social meaning with the more concrete components of linguistic structure”

(Eckert & Labov 2017: 491)

- Evidence that social meaning is limited with respect to the types of linguistic features to which it can attach:
  - more abstract elements of phonological change are immune to evaluation (e.g. chain shifts, parallel shifts, mergers) (Eckert & Labov 2017)
  - Bermúdez-Otero (*forthcoming*) highlights a wider range of issues surrounding its incorporation into explanatory models of change

# (NG) IN NORTHERN ENGLISH

- (ng) refers to the distribution of [ŋ]~[ŋg] in stressed syllables
- e.g. *wrong* [ɹɔŋ]~[ɹɔŋg]  
*singer* [sɪŋə]~[sɪŋgə]
- Variation attested in:
  - ▶ Liverpool (Knowles 1973)
  - ▶ West Wirral (Newbrook 1999)
  - ▶ Manchester (Bailey 2015; Schlee et al. 2015)
  - ▶ Cheshire (Watts 2005)
  - ▶ Birmingham (Thorne 2003)
  - ▶ Cannock (Heath 1980)
  - ▶ Black Country (Mathisen 1999; Asprey 2015)



(Orton et al. 1978: Ph242)

# HISTORICAL PROFILE

- [ŋg] used to be present in **all** contexts for **all** speakers
  - evidence of its historical presence in Proto-Germanic (Ringe 2006) and Old English (McCalla 1984; Voyles 1992; Hogg 2002), e.g. OE *bring* ‘ring’ *bringan* ‘to ring’
- Started to be lost during the Late Modern English period through a process of post-nasal /g/-deletion
- This deletion rule underwent a pathway of change predicted by the life cycle of phonological processes (Bermúdez-Otero & Trousdale 2012)
  - domain narrowing from the **phrase level** to the **word level** and finally to the **stem level**
  - consequently, deletion begins to target a wider set of morphophonological environments

- We can reconstruct these stages of (ng) during the Late Modern English period:

Adapted from Bermúdez-Otero (2011: 2024)

Stage	Realisation of underlying /ŋg/				Rule domain	Period or variety
	<i>finger</i>	<i>sing-er</i>	<i>sing it</i>	<i>sing tunes</i>		
0	ŋg	ŋg	ŋg	ŋg	—	EModE
1	ŋg	ŋg	ŋg	ŋ	phrase level	Elphinston (formal)
2	ŋg	ŋg	ŋ	ŋ	word level	Elphinston (casual)
3	ŋg	ŋ	ŋ	ŋ	stem level	Present-day RP

- /g/-deletion now stable as a stem-level process in most contemporary varieties, but remains variable in the North West and West Midlands of England



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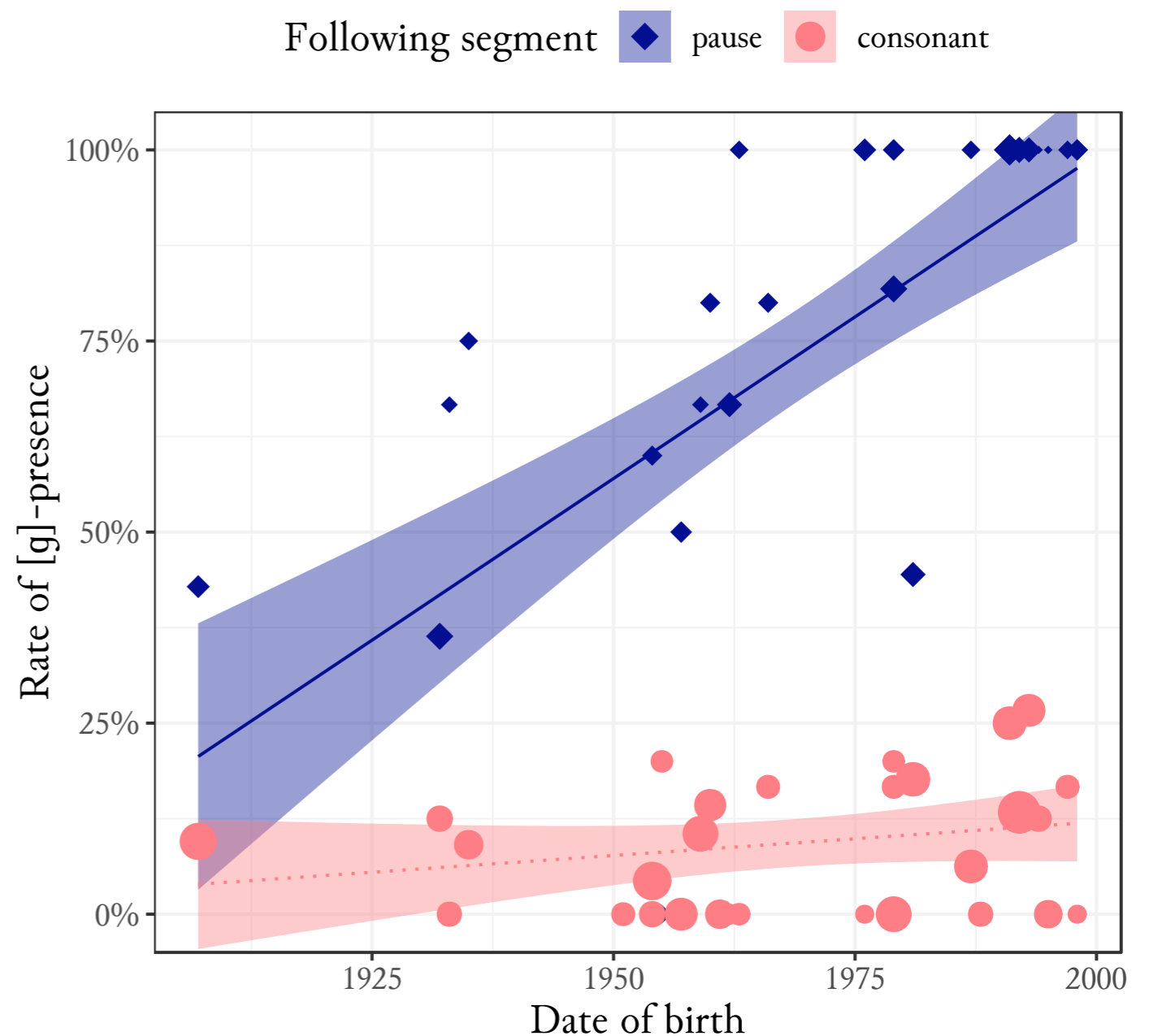
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4	ŋ	ŋ	ŋ	ŋ		Present-day Scots

- /g/-deletion now stable as a stem-level process in most contemporary varieties, but remains variable in the North West and West Midlands of England
- Next natural stage of change might involve RULE GENERALISATION (Kiparsky 1988; Bermúdez-Otero 2013: §3.1)
  - expands from targeting weak position in the syllable (i.e. the coda) to weak position in the foot (i.e. non-foot-initial position)

# THE NEXT STAGE OF (NG)

- Analysis of the 32 sociolinguistic interviews reveals that (ng) is not stable in contemporary varieties of English spoken in the North West...
- ...but the change isn't what we expect!

- ▶ pre-pausal [g]-presence is increasing dramatically in apparent time
- ▶ many younger speakers have a categorical ban on phrase-final [ŋ] with no following stop
- ▶ all other segmental/prosodic environments remain stable



- This is not the next natural progression along the diachronic pathway set out by the theory of the life cycle
- Rather, seems to be an entirely new innovation
  - likely driven by external factors, such as sociolinguistic evaluation
  - any such effect would likely be registered most strongly in phrase-final contexts, which are highly salient (Sundara et al. 2011; Dube et al. 2016)

# SOCIAL PROFILE

No direct evidence of how the dialectal [ŋg] form is evaluated, or of its wider indexicality

clearly a regional variant contrasting with the national/RP standard

[ŋg] favoured by lower socio-economic groups (Mathisen 1999; Watts 2005)

[ŋg] < [ŋ]?

[ŋg] > [ŋ]?

[ŋg] favoured in more formal speech styles (Mathisen 1999; Bailey 2015)

[ŋg] perceived as ‘posh’, possibly due to orthography (Beal 2004)

“a conflict of local and national norms”

(Knowles 1973: 295)

“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

- Matched-guise task, used for uncovering social evaluation of language (Lambert et al. 1960)
- Using the ‘newscaster’ paradigm, which is shown to prime overt sociolinguistic norms (Labov et al. 2006, 2011)
- Each headline 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]

‘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[ $\eta$ g].

Rating of [ $\eta$ g] passage

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

Rating of [ $\eta$ ] passage

subtracted by

positive value indicates  
*higher* rating for [g] guise

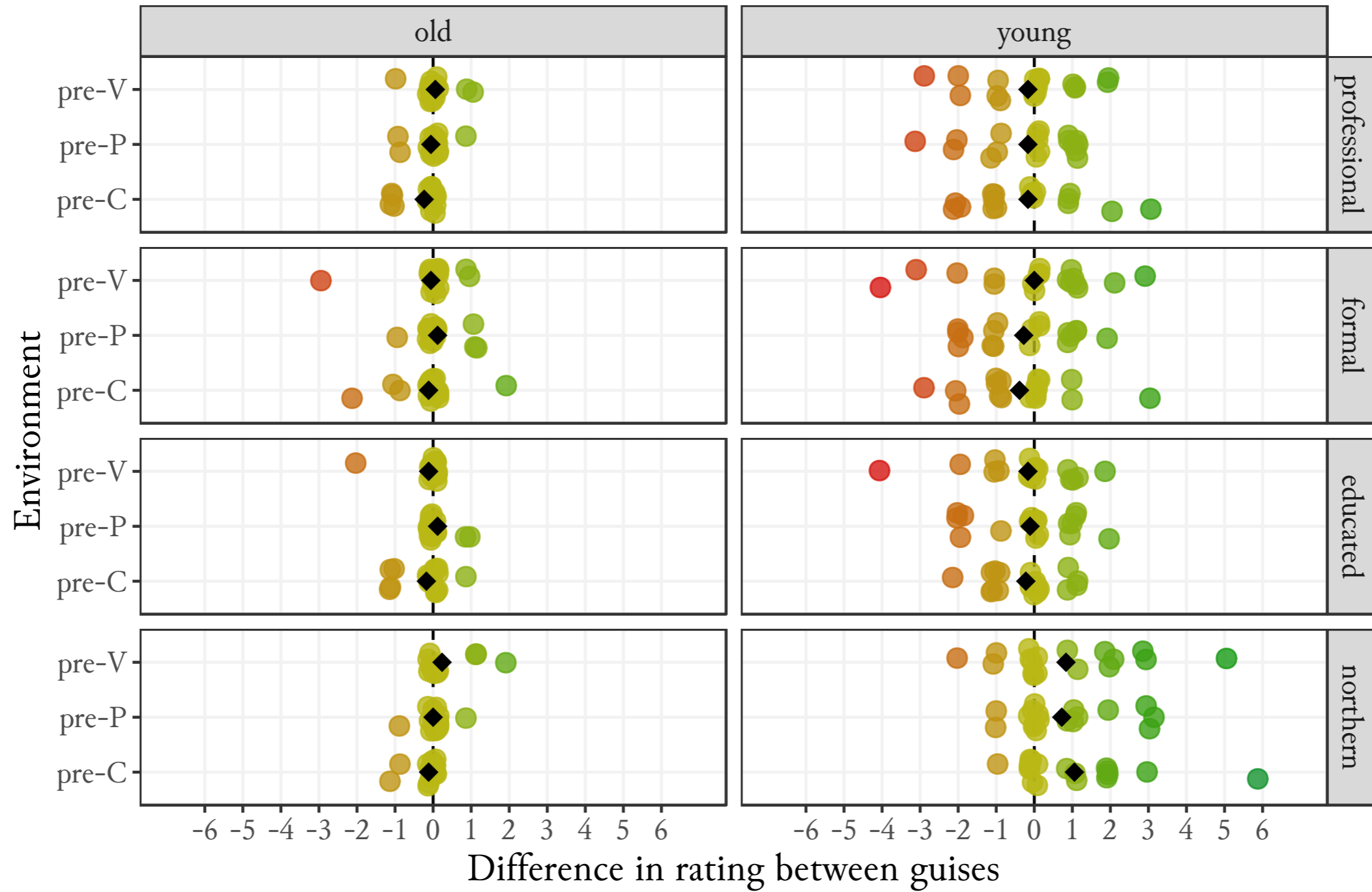
value of 0 indicates no  
difference in rating

negative value indicates  
*lower* rating for [g] guise



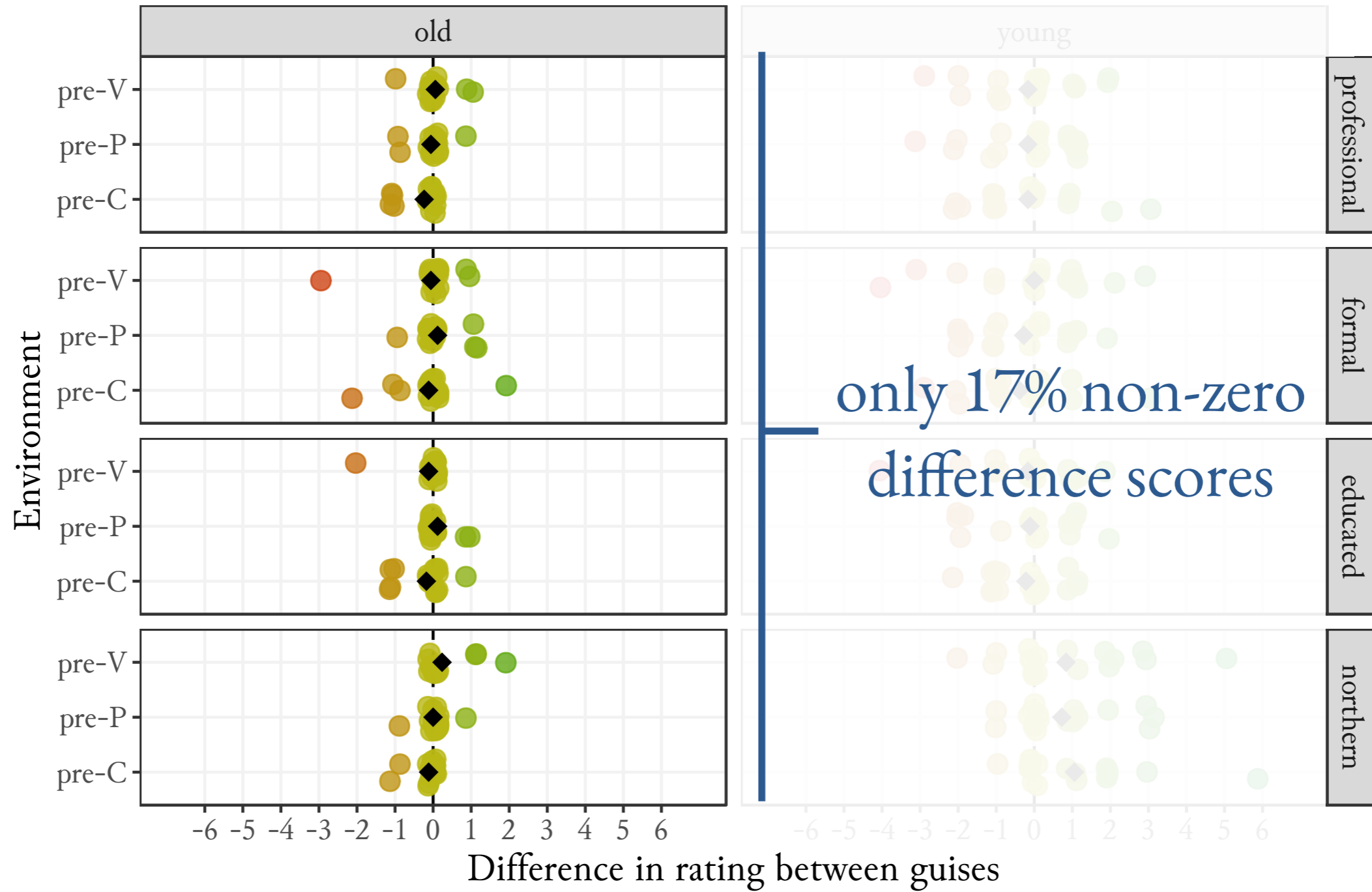
# RESULTS

# EVALUATION OF (NG)



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

# EVALUATION OF (NG)



# EVALUATION OF (NG)



- There are two apparent-time changes in the indexicality of (ng):
  - [ŋg] increasing in strength as a marker of northern dialects
  - now more susceptible to evaluation, but no agreement on its directionality
    - contrary to the PRINCIPLE OF UNIFORM EVALUATION (Labov 2001: 214)
- Crucially, both indexical changes are **independent** of environment
  - the evaluation of (ng) is not sensitive to the environment in which it occurs...
  - ...despite the change in production being restricted to pre-pausal contexts
  - this, coupled with the lack of shared norm, suggests that this is **not** evaluation-driven change

- Functional rather than social motivation?
- Segmental cue to boundaries, adding to existing suprasegmental cues, e.g.:
  - boundary tones (Pierrehumbert & Hirschberg 1990; Swerts 1997)
  - durational lengthening (Lehiste et al. 1976; Gussenhoven & Rietveld 1992; Wightman et al. 1992)
  - non-modal voice quality (Cutler & Pearson 1985; Ogden 2004; Garellek 2015)
- Independent phenomena:
  - ejection also increasing over time and favoured in the exact same segmental/prosodic environment, i.e. for velars, after nasals, and in phrase-final position (McCarthy & Stuart-Smith 2013)
  - [ŋ]~[ŋk] in northern German varieties, [ŋk] favoured IP-finally (Féry et al. 2009)

- (ng) is very much a ‘historical’ variable:
  - ▶ synchronic /ŋg/ variation in contemporary varieties of northern English reflects historical pathway of change
  - ▶ AMPHICHRONIC approach, which foregrounds the synthesis of synchronic and diachronic explanation (Bermúdez-Otero 2013)
- (ng) isn’t really a ‘social’ variable:
  - ▶ recent change in pre-pausal environment is a strong candidate for evaluation-driven change...
  - ▶ ...but perception evidence suggests that this variable has until recently been ‘below the radar’, and even now shows no shared evaluation across the community

- Highlights theoretical issues relating to the incorporation of social meaning in theories of sound change:
  - granularity at which it applies relative to complex conditioning of sound change
  - lack of uniform evaluation, which echoes similar results revealing the mutability of indexical values (Campbell-Kibler 2008, 2011; Moore & Podesva 2009; Phrao et al. 2014)
- Calls into question the role that social meaning plays in producing macroscopic patterns of sound change at the level of the speech community
  - lends support to theories that foreground the importance of mechanical factors, such as density of communication (Bloomfield 1933)



Thank you!

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