

## Synchronic evidence for diachronic pathways of change: /g/-deletion and the life cycle of phonological processes

George Bailey - University of Manchester  
george.bailey@manchester.ac.uk

North western varieties of British English are unique in their lack of ng-coalescence, with surface forms that variably retain voiced velar nasal+stop clusters, e.g. *sing* /sɪŋg/ and *swimming* /swɪ.mɪŋg/. In this paper, I claim that such variation stems from probabilistic application of a rule that deletes post-nasal /g/ in syllable codas. Using data from 24 sociolinguistic interviews conducted in the North West of England, modelled using mixed effects logistic regression, I show how quantitative analysis of this deletion indicates sensitivity to morphophonological structure in ways that are predicted by the life cycle of phonological processes (Bermúdez-Otero 2013). In doing so, I provide the first quantitative account of how synchronic variation in /g/-deletion reflects the rule's diachronic trajectory along the life cycle through centuries of linguistic change.

Assuming a modular feedforward architecture of grammar in which the phonological component is split into stem-, word-, and phrase-level strata, it is shown that the surface probability of /g/-deletion is a function of the number of cycles in which the criteria for deletion are met, determined by the morphophonological environment in the following way:

- (i) **1 chance to apply**: word-internal, pre-vocalic in polymorphemic words, e.g. *singer*
  - /g/ syllabified as onset at word level
- (ii) **2 chances to apply**: word-final, pre-vocalic, e.g. *sing it*
  - /g/ resyllabified as onset at phrase level
- (iii) **3 chances to apply**: word-final, pre-consonantal, e.g. *sing verses*
  - /g/ invariably in coda position in all three strata

Interestingly, /g/-deletion is strongly inhibited in pre-pausal tokens in ways that are not predicted by a purely cyclic account. I provide suggestive evidence that this environment is involved in generational change within the community, with younger speakers reanalysing the pre-pausal category as one that favours /g/-presence. The variability of pre-pausal environments with respect to their effect on /g/-deletion mirrors that of similar lenition process, e.g. /s/-debuccalisation in South American varieties of Spanish (see Kaisse 1996) and /td/-deletion in varieties of English (see Santa Ana 1991 on Chicano English and Bayley 1994 on Tejano English).

I also provide evidence from lab speech, in which tokens of /ŋg/ are elicited before varying prosodic and syntactic boundary strengths à la Sproat & Fujimura 1993, which suggests that this pre-pausal retention of /g/ seems to be a categorical effect of prosodic phrasal position rather than a gradient effect of rime duration by virtue of pre-boundary lengthening. Ongoing work aims to investigate the pre-pausal conversational tokens more closely to determine whether the same prosodic patterns are upheld in more naturalistic conditions.

This study lends quantitative support to the life cycle of phonological processes and adds to a growing body of knowledge regarding the behaviour of probabilistic lenition processes in pre-pausal environments.