

## Dialect, priming, and frequency effects on (-ING) variation in English

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Previous research on (ING) variation (/ɪn/ vs. /ɪŋ/) demonstrates significant conditioning by morphological and lexical factors, in addition to considerable social and stylistic variability. Verbs favor the alveolar variant compared to nominals (Tamminga 2014, Tagliamonte 2004, Horwitz 2016, Labov 2001a), and *something* and *nothing* also have high rates of /-ɪn/ (Houston 1985, Cofer 1972). Tamminga (2014, 2016) reports that morphology restricts priming, with nominal instances of (ING) priming other nominal tokens and verbal tokens priming verbals, but no cross-category priming. Wagner (2015) shows that lexical frequency has a significant effect.

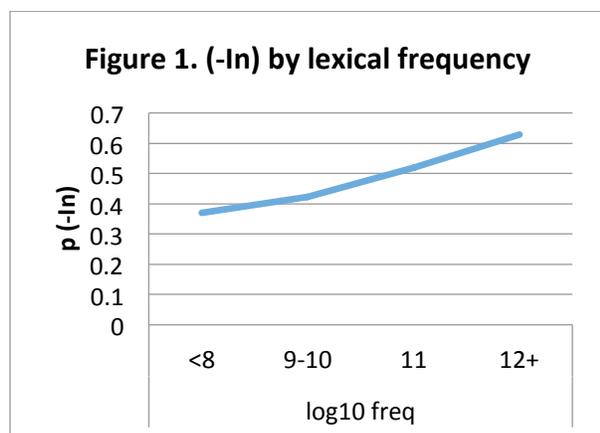
Variation by style and other social factors has been widely reported for (ING) (Trudgill 1974, Horwitz 2016, Labov 2001a,b, Labov 1966). Notably, studies show southern dialects of American English have very high rates of /ɪn/ (Wolfram & Christian 1976), raising the question of how linguistic constraints operate in dialects with widely differing overall rates of /ɪn/. This study investigates this question by comparing variable usage of (ING) among native English speakers from the northern and southern dialect areas of the US. We also test previously reported effects of morphology, priming, and lexical frequency.

Data come from the LDC CallFriend American English Southern and Northern Dialect corpora. Individuals were recorded having a phone conversation with a native English-speaking friend in North America. Speakers were assigned to Northern or Southern corpora based on vowel patterns typical of Southern English (Canavan et al. 1996). Seven conversations (four northern, three southern) were coded for the dependent variable (/ɪn/ vs. /ɪŋ/), morphological class (verbal, nominal, *something/nothing*), phonological context, lexical frequency, and priming. Priming was coded when another (ING) token occurred within the three preceding sentences. The conversations were treated as stylistically uniform.

Multivariate analysis revealed a significant dialect effect, with southern speakers more likely to use alveolars (90% /ɪn/) while northerners favor velars (19% /ɪn/). This pattern held for all individuals studied; all northerners had low /ɪn/ rates, all southerners had high rates. Linguistic conditioning is consistent in both dialects, confirming the dialectal invariance of constraints.

Lexical frequency has a strong effect: more frequent words show more /ɪn/ (Figure 1). Priming is a significant predictor; alveolar tokens favor subsequent alveolars, and velars prime velars. Unlike Tamminga, we found no significant category restriction on priming; priming occurs both between and within morphological categories.

Our results confirm major dialect differences for (ING), but the difference is confined to overall rates of use of the variants, while constraint effects are essentially constant. Lexical frequency appears to be a more powerful predictor than morphology; the low rate of /ɪn/ in nominals is partly a consequence of their lower frequency. Priming is powerful when relevant, but less than 40% of tokens occur in a priming context.



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