

Variability of word-final /ɔ̃/ in Greater Poland Polish

A growing body of evidence suggests that lexical representations include information about the typical phonological environment in which the lexeme occurs (Bybee 2017). Author 1 (in preparation) shows, replicating Eddington and Channer (2010), that the proportion of consonant-initial words following a given word in a corpus influences the likelihood of word-final /t/ in that word being glottalized. The present study investigates another case potentially supporting rich storage: the variability in the realization of the so-called nasal vowel /ɔ̃/ in word-final position in Greater Poland Polish. It is distinct from /t/ glottalization mentioned above, in that it involves a potential case of merger.

The two by far most frequent realizations of word-final /ɔ̃/ (henceforth /-ɔ̃#/) in Greater Poland Polish consist in a sequence of an oral vowel [ɔ] followed either by a nasalized glide [ɔ̃] or a nasal stop [m]. These two variants ([ɔ̃] and [ɔm]) show up with the frequencies of 229/323 (71%) and 80/323 (25%) respectively in a sub-part of the corpus used here (Author et al. forthcoming). The latter realization, [ɔm], matches a phonemic sequence /ɔm/ already widespread in the lexicon, leading to the elimination of contrasts such as 1a and 1b.

1a. *łodzią* /'wɔdzɔ̃/ ['wɔdzɔ̃m] 'boat-INS.SG'

1b. *łodziom* /'wɔdzɔ̃m/ ['wɔdzɔ̃m] 'boat-DAT.PL'

This variability is investigated here to address the following research questions: (RQ1) Which phonological contexts in which /-ɔ̃#/ appears favoring the realization [ɔm]? (RQ2) Is the realization of /-ɔ̃#/ influenced by a given word's **typical** phonological environment? With regard to RQ1, the expectation is that the context /-ɔ̃#F/, where F is a fricative, favors [ɔ̃] whereas /-ɔ̃#P/, where P is a plosive, favors [ɔm]. This is the influence of fricatives and plosives in /ɔ̃/ word-internally. As for other environments, the question remains open - this part of the analysis will be exploratory. As for RQ2, a word-specific effect is hypothesized, in that /ɔ̃/-final words which typically occur in [ɔ̃]-favoring contexts will be more likely to have [ɔ̃]. Such a result would show the influence of typical phonological context on variability.

All tokens of /-ɔ̃#/ have been retrieved from the Greater Poland Speech Corpus ($N=1409$). The boundaries for the oral vowel [ɔ], the 'off-glide' (either [ɔ̃] or [m]), and the following pause (if present) have been hand-corrected. The results of manual coding of the realization of /-ɔ̃#/ can be seen in Fig 1, showing that 1) the most frequent realization is [ɔm] and 2) there seems to be no difference between speakers from Poznań and the rest of Greater Poland. Information about the typical phonological environment of all test words has been retrieved from SUBTLEX-PL (Mandera et al. 2015). These variables will be entered as predictors into a mixed-effects regression model, next to pause duration, following phonological context (retrieved automatically from corpus annotations), interaction of transitional probability and following context, and random terms for speaker and item. The influence of the current phonological environment of each token, and of the typical phonological environment of each lexeme will therefore be assessed.

Word count = 493

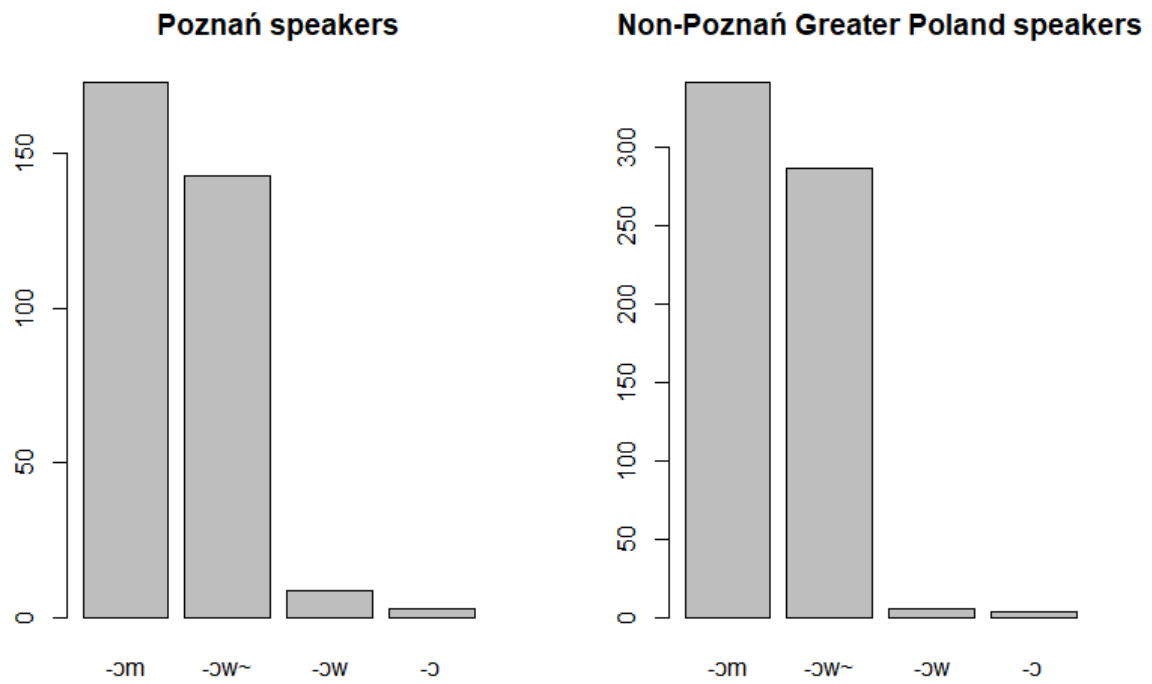


Figure 1: The realization of /-ʂ#/ in the Greater Poland Spoken Corpus, manually coded. -ɔm is a sequence of an oral vowel followed by a nasal stop, -ɔw~ is a sequence of an oral vowel followed by a nasalized labial-velar glide, -ɔw is a sequence of an oral vowel and an oral labial-velar glide, and -ɔ is oral vowel only. The corpus comprises speakers hailing both from Poznań, and elsewhere in Greater Poland, and the two panels show no discernible difference.