## The history of –*n* loss in English: phonotactics, lexical, and grammatical specificity

## Donka Minkova & Michael Lefkowitz

The frequency of final <-en> headwords in Old English is twice as high as words in <-e>, the next most frequent set. The alveolar nasal stop [-n] tops the overall frequency of consonants in Present-Day English (Cruttenden 2014: 235). In coda position the frequency of [-n] is surpassed, narrowly, only by [-t] (Muthmann 1999: 404). Studies of PDE have shown that well-formedness judgments depend crucially on phonotactic frequency (Hammond 2004), and so does the stability/integrity of –VC rhymes in acquisition (e.g. Zamuner et al. 2004, Richmeier et al. 2009). On that basis alone, -n loss in earlier in English runs against the phonotactics projections, yet [-n] shows by far the earliest examples of deletion in weak syllable codas, it remains the only post-vocalic stop in the system that has been lost, that has been added unetymologically (*nunnation*), and it also survives as an allomorphy marker today. Clearly, [-n]-loss and survival is a case of phonotactic well-formedness competing with morphological change.

In Old English /-n/- loss was particularly wide-spread in early Northumbrian, affecting inflectional /-n/ in weak nouns (*foldu* 'earth', *cofa* 'cave', both acc. sg), infinitives (*herġa* 'to praise', *arīsa* 'to arise'), adverbs (*biġeonda* 'beyond', *ūta* 'out' (Campbell 1959: 189-90, Hogg 1992: 305) and other morphologically defined categories. Outside Northumbrian the loss was more limited, though it is clear that it had begun to spread the Southern dialects after about 1050. Kitson's (1992) survey prompts the conclusion that the transition to Middle English, of which /- n/-loss is an important diagnostic, is driven by morphology (ibid. 82). On the other hand, coda /- n/-loss in atonic syllables could also be clearly phonologically-conditioned ad in e.g. *aweġ* 'away' < *onweġ*, *abūtan* 'about' < *onbūtan*, or in the rise of alternate forms such as *cliwen~clew* 'a round bunch', *maiden~maid*, *gammon~game*, *even~eve*, *drightin~dricht* 'lord'. Another phonological factor was avoidance of hiatus: word-final *-n* is frequently lost before unaccented vowels, though this effect is uneven (Reed 1950, Paddock 1989, Schlüter 2009) – it is much weaker in strong past participles, past indicative plurals, and in (most) nouns in *<-en>* (OE *berðen*, ME *byrðen* 'burden', OE, ME *īren*, adj. 'iron').

In Middle English the loss proceeded rapidly, but the triggers behind the different rates of change and the different results for the various categories remain unclear. The previous studies record the orthographic loss of <-n> in the various grammatical forms, but do not address the interplay of phonetic, phonological and morphological factors driving the change. The relationship between /-n/-loss and nunnation in Middle English is also a good target of investigation. Crucially, without an explicit hierarchy of phonotactic salience, frequency, morphosyntactic and pragmatic factors, we still don't know why only some of the <-n>'s survived, both in inflectional morphemes, and in monomorphemic forms in <-en/-on>.

This contribution looks at the multiple conditioning factors, positive and negative, of this particular process, with a view to locating it within the larger framework of the role of phonotactics in diachronic variation and change.

## References

 Campbell, Allastair (1959). Old English Grammar. Oxford: Clarendon Press.
Cruttenden, Alan (2014). Gimson's Pronunciation of English. 8th ed. London: Routledge.
Hammond, M. (2009). Gradience, phonotactics, and the lexicon in English phonology. International Journal of English Studies, 4(2), 1-24. Hayes, Bruce (2014). Comparative phonotactics. In Chicago Linguistic Society (Vol. 50).

Hayes, B., & White, J. (2013). Phonological naturalness and phonotactic learning. *Linguistic Inquiry*, *44*(1), 45-75.

Hogg, Richard (1992). A Grammar of Old English. Oxford: Blackwell.

Kitson, Peter (1992). Old English dialects and the stages of the transition to Middle English. *Folia Linguistica Historica* XI(1-2), 27-87.

Muthmann, Gustav (1999) *Reverse English Dictionary*. Berlin: Mouton de Gruyter.

- Paddock, Harold (1989). On explaining macrovariation in the sibilant and nasal suffixes of English. *Folia Linguistica Historica* 9:1, 235-270.
- Reed, David W. (1950). *The history of inflectional N in English verbs before 1500*. Berkeley and Los Angeles: UC Press.
- Richtsmeier, P. T., Gerken, L., Goffman, L., & Hogan, T. (2009). Statistical frequency in perception affects children's lexical production. *Cognition*, *111*(3), 372-377.
- Schlüter, Julia (2009). Weak segments and syllable structure in Middle English. In D. Minkova (ed.) Phonological Weakness in English. From Old to Present-Day English. New York: Palgrave Macmillan, 199-237.
- Zamuner, T. S., Gerken, L., & Hammond, M. (2004). Phonotactic probabilities in young children's speech production. *Journal of child language*, *31*(03), 515-536.