
The effect of morphological boundaries on stem vowel duration in English

Ingo Plag <i>Heinrich-Heine- Universität Düsseldorf</i> ingo.plag@uni- duesseldorf.de	Ute Marie Engemann <i>Heinrich-Heine-Universität Düsseldorf</i> ute.engemann@uni- duesseldorf.de	Gero Kunter <i>Heinrich-Heine- Universität Düsseldorf</i> gero.kunter@uni- duesseldorf.de
--	---	--

Recent research provides evidence that phonetic detail may reflect aspects of morphological structure. For example, Kemps et al. (2005) and Blazej & Cohen-Goldberg (2015) showed that free and bound variants of a stem may differ acoustically. Looking at several English suffixes realized as /s/ and /z/, Plag et al. (2017) found systematic durational differences between the different morphemes, and between morphemic and non-morphemic segments. Such findings challenge important traditional phonological assumptions and models of speech production.

The present study investigates whether the different morphological contexts also systematically influences the duration of stem vowels preceding final morphemic or non-morphemic consonants in English. We find that pre-boundary vowels are shorter than vowels in the same position of mono-morphemic words. Our results thus provide further evidence for the influence of morphological structure on phonetic detail in a domain hitherto unobserved. While Plag et al. (2017) have shown that the word-final consonant differs in duration depending on the type of morphological context, we show that this effect also extends to the preceding vowel. We will conclude by discussing the implications of our findings for extant theories of morpho-phonology-phonetics interaction.

References: • Blazej, L. J. & A. M. Cohen-Goldberg. 2015. Can we hear morphological complexity before words are complex? *Journal of experimental psychology. Human perception and performance* 41(1). 50–68. • Kemps, R. J. J. K., M. Ernestus, R. Schreuder & H. Baayen. 2005. Prosodic cues for morphological complexity: the case of Dutch plural nouns. *Memory & Cognition* 33(3). 430–446. • Plag, I., J. Homann & G. Kunter. 2017. Homophony and morphology: The acoustics of word-final S in English. *Journal of Linguistics* 53(1). 181–216.