## Morphological effects on the acoustics of word-final /s/

Tim Zee<sup>1</sup>, Louis ten Bosch<sup>1</sup>, Ingo Plag<sup>2</sup>, and Mirjam Ernestus<sup>1</sup> <sup>1</sup>Radboud University Nijmegen <sup>2</sup>Heinrich-Heine University Düsseldorf

Previous research on English has shown that final /s/s in monomorphemic words are acoustically longer than /s/ suffixes, suggesting that morphology influences the articulation of segments (Plag, Homann, & Kunter, 2017). The present study extends this line of research to Dutch by investigating the duration and spectral centre of gravity (CoG) of non-suffixal /s/ (e.g., kies) and plural /s/ (e.g., ski's) across both scripted and spontaneous speech registers in Dutch speech corpora.

Models of the residualised measures showed significant interactions between register and morphological status for both duration and CoG. In conversational speech, non-suffixal /s/ was longer and had a higher CoG than plural /s/. In news broadcasts, only a durational effect was found, whereas read-aloud stories showed no morpho-acoustic effects whatsoever. These results replicate previous durational findings for English. Moreover, the additional spectral difference in conversational speech seems to reflect a general phonetic reduction of /s/ in plurals. However, the differences do not hold across scripted speech registers, suggesting a role for speech planning.

## References

Plag, I., Homann, J., & Kunter, G. (2017). Homophony and morphology: The acoustics of word-final s in English. Journal of Linguistics, 53(1), 181–216.