Reflections of speech prosody in German second graders’ writing to dictation

Frank Domahs¹, Katharina Blessing¹, Christina Kauschke¹ & Ulrike Domahs²

¹ Philipps University Marburg
² Free University of Bozen/Bolzano

In written German, explicit marking of different prosodic features of speech is either not salient, ambiguous, or even completely lacking. During writing acquisition, children have to find out which prosodic features are realized by what means – if any.

We examined traces of speech prosody in German second graders’ writing. Participants were asked to write down sentences to dictation. Each sentence contained a sequence of preposition + definite article + noun (in der HÜTte, hinter dem FELsen). Moreover, the sentences contained trisyllabic animal names with different stress patterns (BOnobo, FlaMINgo, EleFANT), each one preceded by a definite article. We analyzed two potential reflections of speech prosody in children’s dictations:

a) Coupling of preposition and definite article, preferred after monosyllabic prepositions: in this case preposition and article may melt to the standard trochaic foot (e.g., In|der HÜTte, ‘|’ denoting an omitted space), but dispreferred after bisyllabic prepositions, which already form trochaic feet (*HINter|dem FELsen).

b) The introduction of orthographically inadequate graphemic border markings (e.g., spaces, capital letters, punctuation) within the animal names. These graphemic markings should most likely respect borders of prosodic units like foot (Fla^mingo; ‘^’ denoting an added border marking), syllable (Flamin^go), or syllabic constituents (F^lamingo), while border markings within syllabic constituents (F^lamingo) should be least probable.

The occurrence of inter-word and word-internal border markings was evaluated via perceptual judgments of four independent raters. Moreover, we checked for omissions of the definite article in non-optimal prosodic positions (deviating from the preferred strong-weak rhythm).

We found no significant evidence for inter-word border markings being influenced by prosodic context. In fact, the overwhelming majority of the spaces between prepositions and definite articles could be identified reliably. However, word-internal markings within animal names were clearly influenced by prosodic structure: Most of them were produced at borders of feet or syllables, while significantly fewer markings were perceived at borders of syllable constituents or within consonant clusters. Moreover, we observed significantly more omissions of the definite article in non-optimal prosodic positions (Der LeoPARD und der JAguar TOben HINter dem FELsen.) compared to prosodically optimal positions (Der EleFANT und die GiRAFfe LEben in der HÜTte.). These results are similar to findings on language production of two-year old English speaking children (Gerken, 1996).

Thus, our results provide developmental evidence for prosodic influences on writing in a language with scarce graphemic marking of prosody.

References