Does grammatical and cognitive status affect phonetic realization?

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A recent usage-based theory of grammatical status by Boye & Harder (2012) proposes that grammatical words are defined as words that are dedicated to expressing background information, while lexical words have the potential to express foreground information (i.e. to carry the main point of an utterance). It follows from this definition that lexical words can be focused, whereas grammatical words cannot.

This difference in discourse prominence potential between lexical and grammatical words seems to be reflected in attentional processes. Language perception studies found that letters in grammatical elements are less attended to than letters in lexical ones (Rosenberg et al., 1985; Vinther in al., 2015). In this paper we investigate whether the same difference is reflected also in language production.

We present the results of an ongoing corpus study based on the Danish speech corpus DanPASS (Grønnum, 2009) which consists of phonetically transcribed monologues and dialogues from 27 native speakers of Danish. Within this corpus, we searched for tokens from a predefined list of grammatical and lexical words. The list consisted of verbs, determiners and adverbs that were ambiguous with respect to the grammatical-lexical contrast. For instance, *have* ('have') is both an auxiliary and a full verb, and *en* is both an article ('a') and a numeral ('one').

Table 1 Examples of words which can both be grammatical and lexical.

	Grammatical (cannot be focused)	Lexical
en	*Du har en stor firkant* 'You have a big square'	*De skal være cirka en centimeter fra toppen* 'They should be about one centimeter from the top'
have	*Du har passeret et posthus* 'You have passed by a post office'	*Så har vi en lille hvid firkant* 'Then we have a little white square'

Words (or rather word variants; see above on ambiguity) were classified as either grammatical or lexical based on the focalization criteria in Boye & Harder (2012: 13-18). For instance, words that could be focused by means of a focus marker like 'only' or 'just' were classified as lexical.

We present and discuss the analysis of the corpus study, as well as categorization criteria and results of statistical tests. Taking into account differences between items as to the potential for reduction (Schachtenhaufen, 2013), we expect to find differences that grammatical items (e.g. auxiliary *have*) are more reduced than their lexical counterparts (e.g. full verb *have*), thus supporting the concept of grammar as dedicated background information in both perception and production.

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