

Frequency and Category Factors in the Reduction and Assimilation of Function Words: EPG and Acoustic Measures

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Many studies have observed phonetic and phonological differences between function words and content words. However, as many of the most commonly cited function words are also very high in frequency, it is unclear whether these differences are the result of syntactic category or word frequency. This study attempts to determine whether syntactically defined function words are indeed phonologically and phonetically reduced or assimilated when word frequency is balanced. Three experiments were designed to distinguish the relative contributions of the factors of category and frequency on phonetic and phonological reduction and assimilation. Overall results suggest that syntactic category and word frequency interact with phonetic and phonological processes in a more complex way than previously believed. Experiment 1 measured final tld dropping, a reduction process, using electropalatography (EPG). Experiment 2 examined vowel reduction using acoustic measures. In Experiment 3, palatalization, an assimilation process, was examined using EPG. Results showed that tld dropping responds to the factor of syntactic category, whereas palatalization is affected by word frequency; vowel reduction responded to both factors, with a dominant syntactic category effect and a secondary within-category frequency effect. The implications of these findings for models of lexical representation and theories of language acquisition are discussed.

KEY WORDS: function words; electropalatography (EPG); vowel reduction; palatalization; usage-based models.

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