Brown, Megan. (2011). Dialect and Lexical Access: An Investigation into Dialect Density, Dialect Environment and Word Knowledge.

Abstract

Knowledge of non-mainstream dialects may complicate speech comprehension. An auditory lexical decision task is used to establish whether African American English (AAE) speakers process speech similarly to Mainstream American English (MAE) speakers. Once word-level effects are established, hearing dialect-sensitive words in short sentences can increase the cognitive demands of lexical access. Participants may have to curtail the use of time and resources that would be used to activate phonological neighbors or multiple meanings. This dissertation uses words that have different pronunciations in MAE and AAE to determine 1) how AAE speakers represent multiple phonological forms of words and connect them to meaning, 2) how AAE use and density affect lexical access, 3) how immediate dialect environment changes lexical access behavior, 4) how patterns of lexical access change through development, and 5) whether the behavioral patterns continue when dialect-sensitive words are placed in greater linguistic context.

Adult AAE speakers in MAE environments experience phonological facilitation for contrastive words. In AAE environments, AAE speakers only experience phonological facilitation for MAE words, although this effect is sensitive to AAE density. Regardless of environment, most speakers experience semantic interference for words in MAE, but this effect is also dependent on AAE density. AAE-speaking children show different effects of phonological facilitation, and no evidence of semantic interference. Their categorization of nonwords is correlated with how often they use AAE features in speech. In MAE phrase environments, participants experienced phonological facilitation for contrastive words in their dominant dialect. They experienced a decrease in accuracy for contrastive words in their non-dominant dialect. In AAE phrase environments, participants experienced semantic interference for ambiguous words in their dominant dialect. However, ambiguity sped recognition in their non-dominant dialect.