Although much work has investigated various aspects of African American English (AAE), prosodic features of AAE are relatively underexamined (Tarone 1973; Rickford 1975; Wolfram and Thomas 2002; Green 2002; Cole, Thomas, Britt and Coggshall 2005; Thomas and Carter 2006; McLarty 2011, 2018; Thomas 2015). Using the ToBI paradigm (cf. Beckman et al. 2005), prosodic differences between AAE and European American English (EAE) varieties have been identified, with AAE speakers on average using more pitch accents per syllable, while also using L+H* pitch accents at higher rates than European Americans (McLarty 2011; Holliday 2016). However, such an approach relies on analyst-driven annotations whose relevance to naïve, everyday listeners is largely unknown.

Recent work by Cole and colleagues has devised a new methodology for the study of prosody, investigating how naïve listeners (i.e. non-linguists) perceive prosodic prominence (cf. Cole, Mo and Hasegawa-Johnson 2010; Cole, Mahrt and Roy 2015). This approach asks large numbers of naïve listeners to label prosodic prominence in speech, yielding important new insights into the perception of prosody and prosodic variation. These perceived prominences can then be used to mine acoustic correlates and other linguistic factors of prominence in the speech signal. However, this bottom-up, naïve listener-driven approach to identifying acoustic correlates of prosodic prominence has not been applied to voices of different ethnicities, an area of crucial interest to sociophonicians.

The current paper fills this important gap by using naïve listeners from three different listener groups: listeners from Oregon (N=93), and African American (N=60) and Non-African American listeners (N=32) from North Carolina. We then ask these listener groups to identify prominences in the conversational speech of both African Americans and European Americans (from the American South). Participants were recruited from institutions with different demographic compositions: Predominately White Institution (PWI) in Oregon, that has an African American student population of 2.4% and a Historically Black College and University (HBCU) in North Carolina, with an African American population of 79.3%. We examine word-level prominence annotation by the different listener groups, comparing results across participants with more familiarity with AAE and Southern speech (i.e. North Carolina listeners) and with less familiarity (i.e. Oregon listeners). Further, we investigate linguistic factors (F0, Intensity, Vowel Duration, Word Frequency, Part of Speech etc.) of those perceived prominences, asking whether acoustic cues and linguistic factors of prominence differ across ethnicity of voices and ethnicity of listeners, in addition to location of listeners. Additionally, by using listeners from different locations and of different ethnicities, we ask whether greater familiarity with AAE and/or Southern speech affects the acoustic cues and other linguistic factors used by listeners for prominence perception.

Initial results indicate AAE-speaking voices are perceived as having more prominences than EAE-voices, by all listener groups. Results also suggest that acoustic cues for prominence perception differ with respect to both location of listeners (Oregon versus North Carolina), as well as ethnicity of listeners (African American versus Non-African American), suggesting that listeners with varying levels of familiarity with AAE differ in which acoustic cues and other linguistic factors they attend to in prominent prosodic events. Thus, this project affords a deeper understanding of how different ethnic varieties produce prosodic prominence, and the linguistic factors that aid in prosodic prominence perception for everyday listeners, enriching our understanding of production and perception in AAE prosody.
Selected References


