

Prosodic Characterization of Reading Styles using Audio Book Corpora. Michael I Proctor and Athanasios Katsamanis (Signal Analysis and Interpretation Laboratory, University of Southern California, Los Angeles, CA 90089, USA)

Although native English speakers have strong intuitions about the felicity of different reading styles, it is unclear which properties of read speech contribute to these reactions. Although the prosodic structures of read speech and spontaneous speech have been shown to differ (Howell & Kadi-Hanifi 1991; Blaauw 1994), it is not clear whether similar prosodic factors contribute to the perception of different reading styles as more felicitous, nor even whether such differences can be systematically quantified. A large-scale corpus analysis of read speech was conducted to shed more light on the prosodic characteristics of those reading styles preferred and dispreferred by native speakers of American English. Audio book recordings of classic works of English literature by male and female American readers were rated by native speakers. The two most and least preferred renditions were transcribed at lexical and phonemic levels using SailAlign (Katsamanis 2011). A variety of metrics were calculated to characterize prosodic properties of each of the readers, including %V, VarCoV, VarCoC and nPVI (Grabe & Low 2002; Stojanovic 2009). The results suggest that although listeners exhibit a preference for syllabic regularity, the perceived felicity of reading styles results from a combination of factors. [Supported by NIH].

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Telephone number: 1 203 887 4418

email address: mike.i.proctor@gmail.com

Send notice to: Michael Proctor.

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