Rhythm Variation in Varieties of English: A Quantitative Comparison between Punjabi English and Standard Southern British English

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This paper presents a study on the rhythmic properties of Punjabi English (PE), a variety of English which has yet to be quantitatively analysed in this respect, by comparing it to Standard Southern British English (SSBE). Since the early ideal of isochrony in speech and the dichotomy between stress-timing and syllable-timing in the rhythm of languages have been called into question, the study of rhythm has taken an empirical turn. A multitude of rhythm metrics have been designed, many of which enjoy success in capturing the contrast between different languages and varieties to varying degrees. There seems to be, however, nonetheless an inclination in the literature to implicitly operate in the legacy paradigm of syllable-/stress-timing.

The controlling/compensating (CC) model, grounded upon articulatory phonology, was proposed as an alternative theory for rhythm in language (Bertinetto & Bertini, 2008a, 2008b, 2010; Bertini & Bertinetto, 2009). Still in its infancy, the model has only been subjected to limited empirical testing. This study thus also takes the opportunity to provide one of the first empirical reviews of the CC model.

Read passages from the IViE corpus (Grabe, Post & Nolan, 2001) by PE speakers from Bradford and SSBE speakers from Cambridge were segmented and rhythm metrics (nPVI-V, VarcoV, DnCCI-V & DnCCI-C) were computed in R. Results show that PE exhibits significantly lower variability in vocalic durations than SSBE, but no significant differences are reported for the consonantal measure. These distinctions provide quantitative support for descriptions suggesting that rhythm in varieties of South Asian English is marked by its lack of vowel reduction. Support for the CC model is mixed: while DnCCI seems to possess some discriminatory power, in the present study it has failed to place SSBE as a "compensating" variety as predicted, pointing to the need to further refine the framework.

Reference

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