



Rhythmic variability in 'Polglish' – work in progress report

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The distinction between stress-timed and syllable-timed languages has long been present within the area of speech rhythm investigation with English traditionally classified as a stress-timed language (eg. Pike, 1946; Abercrombie, 1967). Polish, originally believed to belong to the class of syllable-timed languages, has been found by recent instrumental research to show characteristics associated with both rhythm classes: low standard deviation of vocalic intervals - a characteristic of syllable-timed languages, and comparatively high standard deviation of intervocalic intervals – typical of stress-timed languages (Ramus, Nespore & Mehler, 1999), and labelled a mixed type. A number of studies employing metrics for the quantification of speech rhythm have shown evidence of considerable rhythmic variability not only between rhythm classes, but also within classes (e.g. White & Mattys, 2007; Ferragne & Pellegrino, 2004; Low, Grabe & Nolan, 2000). This project presents instrumental duration measurements based on a vowel segmentation and identification of interstress intervals (feet) for English as a second language, which was an attempt to demonstrate the degree of variability within rhythmic patterns of ten non-native (Polish) speakers of English, and see whether the results are comparable with the rhythmic patterns exhibited by native speakers of English. A set of phrases under investigation was selected from a dialogue read by a group of second-year students of English at University of Łódź and subjected to acoustic measurement with the use of Praat software version 5.0.29 (Boersma & Weenink 2008) and calculations of rhythm metrics including %V – the timing proportions of vocalic intervals in an utterance, ΔV - standard deviation of vocalic intervals, rate-normalised VarcoV - standard deviation of vocalic intervals divided by the mean vocalic interval duration.

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