

Rhythm in World Englishes
A look at the interaction of phonology and lexico-grammar
from a corpus-based perspective

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This talk investigates the connection between stress and rhythm in World English. More specifically, it demonstrates that the impact of rhythmically different L1-contexts can be detected in the (written) output of institutionalised second-language varieties of English. In a second step, I will be asking the question whether these differences have an impact on the lexico-grammatical inventory of English world-wide.

It is a well-established fact that languages have rhythmic properties. Following Pike (1945) and Abercrombie (1965, 1967), languages have traditionally been categorised as stress-timed (e.g. English) or syllable-timed (e.g. Spanish); in addition, a number of languages have been classified as being mora-timed (e.g. Japanese, see e.g. Han 1962). More recent experimental research (e.g. Dauer 1983, 1987) has shown that these rhythmic classes are not clearly defined and that we are instead dealing with a continuum of rhythmic variation.

For English, there is a considerable body of research on what has been termed the Principle of Rhythmic Alternation ('PRA', Sweet 1876) – i.e. the general tendency to maintain an alternation of stressed and unstressed syllables. The bulk of this research is on written data (or on orthographically transcribed speech) and focuses on preferences in lexical or grammatical choice (e.g. *drúnken sáilor* instead of *drúnk sáilor*) or word ordering preferences (e.g. *compléte and únabridged* instead of *únabridged and compléte*) that are interpreted as resulting from stress-clash – or stress-lapse – avoidance strategies (see e.g. Schlüter 2005; Shih 2017). Complementing this work, there is a growing body of corpus-based research in phonology assessing the status of metrical constraints on a more global scale. Based on simple bigram probabilities in a large variety of corpora comprising more than 10 million words, Breiss & Hayes (2020) show that metrically critical bigrams – i.e. phonetic contexts deemed less preferable by the PRA – are underrepresented in their data.

A number of varieties of English have been claimed to exhibit clear tendencies towards syllable timing (see e.g. the list in Mesthrie & Bhatt 2008: 129). For Singapore English, for example, this classification is supported in studies by Low and colleagues (e.g. Low 1998, Low & Grabe 1995, Low et al. 2000); for a book-length study of speech rhythm in acrolectal Indian English, see Fuchs (2016). All inner-circle varieties of English (cf. Kachru 1985), however, are said to be stress-timed. Given the differences between inner and many outer circle varieties of English, it can be expected that the PRA should apply to different degrees. By applying the approach taken by Breiss & Hayes (2020) to GloWbE corpus data (Davies & Fuchs 2015), I demonstrate that this indeed appears to be the case. However, some of my findings are inconclusive and further analysis is clearly needed to link these general variety-specific co-occurrence preferences to individual lexical and/or lexico-grammatical patterns.

This study is thus exploratory in nature. In addition to the linguistic results I present, I will focus on some methodological issues as well as the theoretical implications of my findings for the study of so-called native and non-native varieties of English.

References

- Abercrombie, D. (1965) *Studies in Phonetics and Linguistics*. London: Oxford University Press.
- Abercrombie, D. (1967) *Elements of General Phonetics*. Edinburgh: Edinburgh University Press.
- Breiss, C. & Hayes, B. (2020) "Phonological Markedness Effects in Sentence Formation." *Language* 96(2), 338–370.
- Davies, M. & Fuchs, R. (2015) "Expanding Horizons in the Study of World Englishes with the 1.9 Billion Word Global Web-based English Corpus (GloWbE)." *English World-Wide* 36(1): 1–28.
- Dauer, R.M. (1983) "Stress-timing and Syllable-timing Re-analysed." *Journal of Phonetics*, 11: 51–62.
- Dauer, R.M. (1987) "Phonetic and phonological components of language rhythm." *Proceedings of the XIth International Congress of Phonetic Sciences*, Tallinn, Estonia, 447–450.
- Fuchs, R. (2016) *Speech Rhythm in Varieties of English: Evidence from Educated Indian English and British English*. Singapore: Springer.
- Han, M. S. (1962) "The Feature of Duration in Japanese." *Onsei no kenkyuu*, 10: 65–80.
- Kachru, B.B. (1985) "Standards, Codification, and Sociolinguistic Realism: The English Language in the Outer Circle." In R. Quirk & H.G. Widdowson, eds. *English in the World: Teaching and Learning the Language and the Literature*. Cambridge: Cambridge University Press. 11–30.
- Low, E.L. (1998) *Prosodic Prominence in Singapore English*. Doctoral dissertation, University of Cambridge.
- Low, E.L., & Grabe, E. (1995) "Prosodic Patterns in Singapore English." *Proceedings of the XIIIth International Congress of Phonetic Sciences*, Stockholm, 13 – 19 August: Vol. 3: 636 – 639.
- Low E.L., Grabe, E. & Nolan, F. (2000) "Quantitative Characterizations of Speech Rhythm: Syllable-Timing in Singapore English." *Language and Speech* 43(4): 377–401.
- Mesthrie, R. and Bhatt, R.M. (2008) *World Englishes: The Study of New Linguistic Varieties*. Cambridge: Cambridge University Press.
- Pike, K. (1945). *The Intonation of American English*. Ann Arbor: University of Michigan Press.
- Schlüter, J. (2005) *Rhythmic Grammar: The Influence of Rhythm on Grammatical Variation and Change in English*. Berlin/New York, NY: de Gruyter Mouton.
- Shih, S.S. (2017) "Phonological Influences in Syntactic Alternations." In V. Gribanova & S.S. Shih, eds. *The Morphosyntax-Phonology Connection*. Oxford: Oxford University Press. 223–252.
- Sweet, H. (1876) "Words, Logic, and Grammar." *Transactions of the Philological Society, 1875-1876*: 470–503.