
Another kind of rhythm: rhythm metrics revisited

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This talk begins with a study of the position of Moroccan Arabic (MA) in the prosodic typology of rhythmic classes. In this typology, languages are classified into stress-timed (e.g., English), syllable-timed (e.g., Spanish), and mora-timed (e.g., Japanese) languages. Whereas in languages like English or Spanish, every word (of more than one syllable) typically has one syllable that stands out (being louder, longer, or higher in pitch), MA appears to have no clear evidence for word-level stress (Bruggeman et al. 2020, Dell & Elmedlaoui 2002) and stands out as an outlier by conventional prosodic typology metrics (Hamdi-Sultan et al. 2004). However, unlike in languages on which prosodic typology metrics were developed, MA has been claimed to admit consonants as syllable nuclei (Al Ghadi 1994, Boudlal 2002, Dell & Elmedlaoui 2002, Bensoukas & Boudlal 2012). Taking this into account, we computed acoustic rhythm metrics for MA in two ways: first, directly from the raw phonetic data; second, using the same data but counting any consonant that (on theoretical grounds) functions as a syllable nucleus as part of the quantity that, in the more familiar languages, is captured by vowel duration. Using the former method, we replicate the extreme outlier position of MA in rhythm metrics reported by Hamdi-Sultan et al. (2004). Using the latter, MA turns out not to be an outlier but falls squarely within a region proximal to that of Japanese. Our findings highlight the importance of considering language-specific syllable structure in rhythm metrics and establish a connection between rhythm and intersegmental coordination. The second part of the talk turns to articulatory data, presenting results from ongoing work that aims to identify a notion of rhythm that transcends conventional prosodic typology differences. The presented work is in collaboration with Larissa Gronwald (Potsdam), Stephan Kuberski (Potsdam), Abdelaziz Boudlal (Casablanca), and Karim Bensoukas (Rabat).

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