Interactions between word prosody, prominence type, and macro-rhythm

Sun-Ah Jun
(University of California Los Angeles)

The prosodic property of an utterance is a combination of prosody at the word level as well as the phrase level. Word prosody, which is categorized by whether a language has lexical pitch accent, stress, tone, some combination of these, or none of these, affects sentence prosody, especially how rhythmic the intonation pattern of a sentence is and how prominence is marked at a sentence level, i.e., whether the prominence is cued by the head of a word/phrase (e.g., stress/pitch accents), by a boundary tone at the phrase edge, or by both. Therefore, the interaction between word prosody and sentence prosody can be captured by studying prosodic typology based on the autosegmental-metrical model of intonational phonology. In this intonation model, the number of pitch accents/edge tones, the type of the most common pitch accent/edge tone, and the domain of pitch accent/ edge tone allow us to predict how rhythmic the intonation contour is (i.e., how regular High/Low alternation is). I call this tonal rhythm *macro-rhythm*. By adding the parameter of *macro-rhythm* to the two prosodic parameters – word prosody and prominence type, we can capture similarities and differences across languages. Based on models of intonational phonology of 40+ languages, I will show how languages of different prominence type and word prosody can be divided into different degrees of macro-rhythm group. The data suggest that the degree of macro-rhythm is stronger in edge-prominence languages than in head-prominence languages, even though a language can have strong macro-rhythm regardless of its type of prominence marking. Finally, I will discuss functions of macro-rhythm and how macro-rhythm is related to speech timing and word prosody.