Articulatory correlates of prominence in French: Comparing L1 and L2 speakers

Caroline Smith
UNM Linguistics
with Donna Erickson* and Christophe Savariaux†
*Kanazawa Medical University    † GIPSA-Lab, Grenoble

Previous work in several languages has shown that prosodic structure is evidenced in articulation as well as in acoustics (e.g. for English, Cho 2001; for French, Tabain 2003a,b). This study investigates how L1 and L2 speakers of French produce articulatory and acoustic correlates of French accentuation. The L2 speakers had English L1, and given the differences in prosodic structure between English and French, we might expect that they would produce prosodic structure in their L2 that differs substantially from the L1 French speakers. A salient difference is that French does not have lexical stress, but it does have accented syllables whose distribution is determined by their position in phrases, unlike English where stressed syllables can occur in any position.

Our study looks at jaw and tongue displacement in L1 and L2 speakers of French using electromagnetic articulography; we also examined acoustic duration and vowel formant values. We test how well these correlate with prosodic structure for French L1 speakers, and examine L2 speakers of varying proficiency to see if they implement similar patterns, or whether they use English-influenced patterns even when speaking French. The results show considerable individual variation among the L1 speakers, but generally their phrase-final syllables were lengthened and produced with expanded articulations. The durational patterns of the L2 speakers were not greatly different from the L1 speakers, but they differed more with respect to jaw displacement and vowel formant values.

References