Victor J. Boucher and Annie C. Gilbert (2008) Université de Montréal

Investigations of speech segmentation: Addressing the writing bias in language research

Abstract

We address the problem of defining universal processes of speech segmentation in view of criticisms that conceptual linguistic units derive from western writing. A synthesis of our recent experimental studies is presented bearing on processes of serial-order and rhythmic grouping. First, on how serial-order operates, we use EMG and speech-motion data to show that ``consonant-vowel`` orders reflect contraction-relaxation cycles (not separate segments). Second, on how sequences of sounds come to form units in language learning, we discuss behavioural data suggesting a link between rhythm groups in speech and grouping effects on memory of speech sounds. Preliminary EEG data is then presented to substantiate the view of an online parsing of rhythm groups with effects on memory traces of lexemes.

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