

described event using a verb (knows vs. thinks). Sentences were presented word-by-word and EEG was recorded. Results in all three experiments clearly showed that both groups activate mental simulations of language. However, the strength and timing of these effects differed between the two groups, which might account in part for comprehension difficulties in ASD.

Is word-initial consonant lengthening a universal speech segmentation cue?

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Prosody guides listeners to word and phrase boundaries. Whilst some cues – such as the predominant pattern of stress placement with respect to word boundaries – are language-specific, lengthening of vowels in phrase-final syllables has been proposed to be a universal cue to upcoming boundaries (Beckman, 1992). Lengthening of onset consonants in word-initial syllables is also widely observed across languages, and is therefore another potentially universal segmentation cue (Keating, Cho, Fougeron, & Hsu, 2003).

Using an artificial language learning paradigm, we have found that English listeners use consonant lengthening as a cue to a preceding word boundary (White, Mattys, Steffansdottir, & Jones, submitted). Here we adapted that methodology for cross-linguistic use. We created an artificial language comprised of four trisyllabic (CV-CV-CV) sequences, none of which resembled any real words in English, Hungarian and Italian, three languages with distinct prosodic characteristics. Two versions of the language were prepared: (a) all vowels and consonants had the same duration; (b) the initial consonant of each trisyllabic word was lengthened. As before, English listeners recalled the language better when word-initial consonants were lengthened. The experiment continues to establish whether speakers of Hungarian and Italian also use word-initial consonant lengthening as a segmentation cue.

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White, L., Mattys, S., Steffansdottir, L. & Jones, V. (submitted). An amendment to the iambic-trochaic law: Lengthened consonants are interpreted as word-initial.

Object knowledge influences perceptual and attentional stages of visual processing

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