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Julia Krebs, Evie Malaia, Ronnie B. Wilbur, Dietmar Roehm

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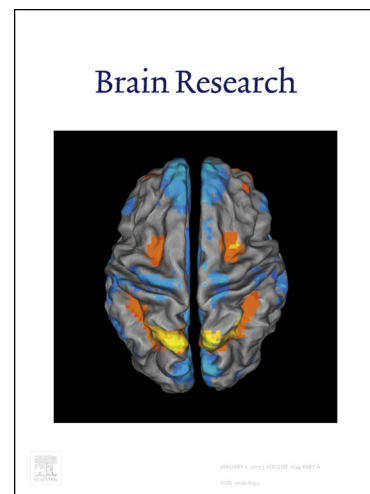
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Subject preference emerges as cross-modal strategy for linguistic processing

Julia Krebs^{a,b,*}, Evie Malaia^c, Ronnie B. Wilbur^c, Dietmar Roehm^{a,b}

^a *Research group Neurobiology of Language, Department of Linguistics, University of Salzburg, Erzabt-Klotz-Straße 1, 5020 Salzburg, Austria*

^b *Centre for Cognitive Neuroscience (CCNS), University of Salzburg, Salzburg, Austria*

^c *Linguistics Program, and Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, Lyles-Porter Hall, West Lafayette, IN 47907-2122, USA*

* Corresponding author at: Research group Neurobiology of Language, Department of Linguistics, University of Salzburg, Erzabt-Klotz-Straße 1, 5020 Salzburg, Austria; E-mail address: julia.krebs@sbg.ac.at; phone number: 004369917117726

Abstract

Research on spoken languages has identified a “subject preference” processing strategy for tackling input that is syntactically ambiguous as to whether a sentence-initial NP is a subject or object. The present study documents that the “subject preference” strategy is also seen in the processing of a sign language, supporting the hypothesis that the “subject”-first is universal and not dependent on the language modality (spoken vs. signed). Deaf signers of Austrian Sign Language (ÖGS) were shown videos of locally ambiguous signed sentences in SOV and OSV word orders. Electroencephalogram (EEG) data indicated higher cognitive load in response to OSV stimuli (i.e. a negativity for OSV compared to SOV), indicative of syntactic re-analysis cost. A finding that is specific to the visual modality is that the ERP (event-related potential)-effect reflecting linguistic reanalysis occurred earlier than might have been expected, that is, before the time point when the path movement of the disambiguating sign was visible. We suggest that in the visual modality, transitional movement of the articulators prior to the disambiguating verb position or co-occurring non-manual (face/body) markings were used in resolving the local ambiguity in ÖGS. Thus, whereas the processing strategy of “subject preference” is cross-modal at the linguistic level, the cues that enable the processor to apply that strategy differ in signing as compared to speech.

Keywords: Ambiguity resolution, Subject preference, Sign language processing, Event-related potentials, Cross-modality

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