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Once upon a time in the realm of deixis. Temporal dynamics of spatial demonstratives during mother-child book reading

Abstract:

Drawing on recent works in developmental psychology and linguistics (Carpenter et al., 1998; Liszkowski 2008; Yoshida & Smith, 2008; Yu and Smith, 2013), this study focuses on the importance of multimodal approaches to early adult-child deictic interactions. Speech, gesture and eye-gaze are harmoniously engaged in creating a common ground and in sharing early communicative intent (Leaven, 2016; Tomasello, 2003), as deixis, one of the first domains children move comfortably into, shows (Clark & Sengul, 1978; Diessel, 2006, 2013; Talmy, 2018). Notwithstanding, while speech (i.e. spatial demonstratives) and gesture (pointing) show a detailed deictic characterization, the role of eye-gaze falls broadly into the wide field of joint attention (Carpenter et al., 1998; Stukenbrock, 2015; Yu and Smith, 2017), with no clear relation to its linguistic counterpart and little knowledge of the temporal dynamics of their coordination. In order to fill this gap, the present study focusses on two main questions: how do verbal and nonverbal modalities work together immediately before deictic episodes? Do they show any multimodal structural priming effect during early adult-child interactions?

To that end, eight typically developed Italian children (20-33 months) have been videotaped during triadic mother-child book-reading sessions focusing on the occurrences of spatial demonstratives in a semi-naturalistic setting. Deictic occurrences have also been analysed to highlight whether they were affected by the forms produced by the interlocutors (see Pickering and Ferreira, 2008). Our exhaustive analysis of the overall deictic productions shed light on three main findings: a) the multimodal pattern preceding deictic communication is characterized by a predominant shared object attention condition led by eye-gaze, which positively correlates with children’s Mean Length of Utterance and morpho-syntactic complexity level, and interweaves with the recent findings of Yu & Smith (2017) on eye-hand following patterns during mother-child interactions, b) children’s (20-33 months) use of deictic communication is overwhelmingly synchronous multimodal, and further c) this synchronous multimodal deictic communication is unaffected by the deictic communication forms their caregivers take in subsequent deictic productions.

Although we acknowledge that a larger population is needed to confirm our results, we do believe that, being the first experimental study specifically concerned with the use of demonstratives in early child language, it represents an important contribution to the study of
multimodal adult-child interaction and provides a first attempt for a more fine-grained picture of the verbal and nonverbal interactive nature of deixis in the very early phases of language acquisition.

References:


