

Modality independent processes in systematising a visual gestural language

Children exposed to sign languages early in life acquire words and grammar along predictable milestones (Morgan & Woll, 2002; Mayberry & Squires, 2006). While the modality often influences how language is structured in the adult input and the types of immature productions made by children, the psycholinguistic outcome of early first language acquisition is broadly similar across the two modalities. This is interesting as signed languages are perceived and articulated in very different ways to spoken languages. However children appear to treat sign language as just that – language. As most children are able to use communicative gestures before they are able to speak it might have been the case that signing children would be able to sign significantly earlier than their speaking peers, because of the availability of gesture and iconicity. Despite early claims in the literature for this sign advantage, most recent research shows no differences in sign and spoken language development (e.g. Woolfe et al, 2010). It is easy to see why some researchers saw signing as a more accessible and easier to produce language type than spoken languages. The main articulators (the arms/hands and face) are bigger and more salient than the equivalent ones for speech, making perception and production easier in the first year. There is also a great deal of overlap between sign language grammar and the gestures non-signing people use when they are speaking. Children might bootstrap from gesture into signing directly as both are within the same modality; a process which appears more difficult for gestures to words as they occur in different modalities. Contrary to these possibilities I will argue in this paper that children acquiring sign or spoken languages are faced with a similar problem to solve: how do I make my language systematic? In two domains: phonology and morphology I will describe how young children use modality independent learning process to acquire a system. In the domain of phonology I describe familiar simplification processes observed in children's attempts at producing their first signs. The sensory-motor limitations of the child leads sign production to be organised around motivated simplifications (Morgan, 2006). In a new study I document the differences in how children do these phonological simplifications when their parents provide fluent sign input (in the case of child native signers) and children whose target language is less frequent and more variable (non native child signers). In the second domain I describe a study of the acquisition of complex morphological devices in signing. By applying evidence of productivity we were able to differentiate between the child's early gestures and much later his acquisition of a systematic grammar (Morgan, et al, 2008). In interesting ways sign language acquisition mirrors sign language evolution in the sense that gestural forms are recruited and transformed into a more systematic language.

References

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