The Effect of PP Type on Recursive Modifications in Monolingual English Children

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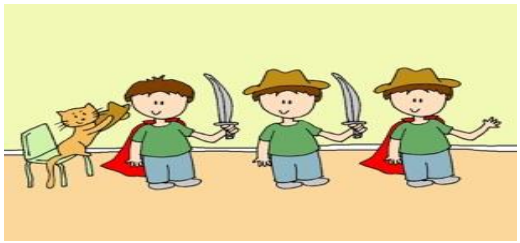
Recursive embedding is difficult for monolingual children (Roeper, 2011; Pérez Leroux et al., 2012; in press). This is true for both comprehension (Roeper, 2011) and production (Pérez Leroux et al. 2012; in press). Studies on children's production of recursive NP modification reveal they do not approach adult like performance until 6;0 years of age (Pérez-Leroux, In Press). Pérez Leroux et al. (in press) report an asymmetry in children's production of locative recursive double modification (RDM) and sequential double modification (SDM) l (i.e. [the bird [*on* the crocodile [*in* the water]]] vs. [the books [*in* the box] [*under* the chair]]). Here, we explore children's production of RDM and SDM with comitative PP modifiers compared to locative PP modifiers. *Is RDM more difficult than SDM regardless of PP type?* If difficulty stems from depth of embedding recursion should be difficult regardless of PP type; both comitatives and locatives should be equally difficult to produce.

An elicitation production task was designed based on Pérez-Leroux et al. (In Press) and Pérez-Leroux et al. (2012). Children were read a story that set up a question which elicited a locative/comitative RDM or SDM construction (Figure 1). Items were designed to elicit the same lexical preposition at each level of embedding and nouns were semantically matched in the stories to control for item-effects.

We report preliminary results comparing monolingual English speaking children's (n = 9, age range = 4;5 – 5;11, M = 5;3) production of locative and comitative RDM and SDM. A generalized linear mixed-effect model was fitted on frequency of target responses, with condition and type as fixed effects, and participants as a random effect. The model indicated that overall, children produced significantly less target RDM responses than SDM responses (β= -1.013, p<0.01) and this was true regardless of PP type (β= -0.322, p=2.95). Our findings strengthen claims of an RDM vs. SDM asymmetry in child language as these findings hold regardless of PP type. These preliminary results are important because they contribute to furthering our understanding of recursivity in acquisition and in theory. The RDM vs. SDM asymmetry must be accounted for either in the way that recursivity is defined or in terms of processing constraints in child language.

Figure 1. Sample Illustrations for the Comitative RDM and SDM Target Referents

a. Comitative RDM [The girl [*with* the hat [*with* the flower]]]	**b. Comitative SDM** [The boy [*with* the cape] [*with* the sword]]
 Oh no, one of the girls dropped her purse in a puddle. Which girl dropped her purse?	 Look! One of the boys lost his hat. Which boy lost his hat?

References

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