## Preschoolers' comprehension of information structure: New evidence from the effect of sentence-level focus on logical scope

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## Abstract

The bulk of existing research suggests that L1 acquisition of information structure (IS) is a particularly prolonged process, pointing to non-adult-like patterns of comprehension at preschool ages [1]. Most previous experimental studies targeting preschoolers' comprehension of prosodically marked focus collected responses that require children to correctly identify the set of contrasting alternatives licensed by focus-marking (e.g., [2], [3], [4]). Pursuing a different strategy, here we investigate preschoolers' comprehension of sentence-level focus by capitalizing on a systematic effect it has on logical scope in negated sentences [5].

The experiment, conducted with Hungarian children (n=38; 4;1-6;10) and adult controls (n=38), employed an innovative Truth Value Judgment task. Critical sentences (of the form "The lamb doesn't like the tangerine or the orange") were potentially SCOPE ambiguous, giving rise to a narrowscope disjunction (=the lamb likes neither) and a wide-scope disjunction reading (=the lamb dislikes either one or the other). Each critical sentence (n=10) was uttered either with neutral IS or with focused negation (Fig-1), placed either in a Disjunction Narrow Scope (DNS) or in a Disjunction Wide Scope (DWS) animated scenario.

A GLMM analysis of the results (Fig-2) reveals that focus on negation shifts participants' scope interpretation uniformly across the two age groups in the same, opposing directions in the two different target scope conditions (DNS: p=.02, DWS: p<.001). The increase in DNS readings and decrease in DWS readings induced by focus on negation gives rise to a highly significant interaction between SCOPE and IS (p<.0001), which, as the degree of the effect of IS is numerically also parallel in children and adults, does not further interact with age group.

These results strongly suggest that preschool children already have the competence to access prosodically marked IS in comprehension, and they can exploit it in an adult-like manner to guide logical scope interpretation. Since focusing marks the relationship between the sentence and its context, this finding ties in with earlier results indicating that children's scope interpretation is sensitive to contextual factors of discourse relevance [6], [7]. The failure of many previous experiments to reveal preschoolers' adult-like interpretation of focus-marking may be ultimately taskrelated [8], [9].



## References

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