

The interaction of focus particles and information structure in acquisition

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This study investigates how German speaking 6-year-old children interpret sentences with the focus particle (FP) *nur* ‘only’. Challenging previous accounts, our results show that children’s difficulties with FPs are caused by the specific information structure of FP-sentences rather than by syntactic or semantic-pragmatic contributions to the interpretation of FP-sentences. Information structure refers to a partition of a sentence in two informational units: topic, which is usually the given information and focus, which is usually the new information (cf. von Heusinger 1999). In an unmarked information structure the topic constituent appears sentence initial and is typically associated with the subject while the focused constituent appears sentence final, thus is the prototypical object. To highlight the focused constituent FPs like *nur* may be used (see 1).

(1) Der Elefant hat *nur* [einen Ballon]_{focus}. The elephant has *only* [a balloon]_{focus}.

Previous research on the comprehension of FP-sentences provided mixed evidence regarding the question how pre-school children interpret FP-sentences (Berger & Höhle 2012, Crain et al. 1994, Müller et al. 2011, Paterson et al. 2003, Zhou & Crain 2011). Importantly, regardless of whether an adult-like performance was found or not, children were consistently found to perform better on FP-sentences when the focused constituent was in a sentence final position like (1) than in sentence initial position like (2).

(2) *Nur* [der Elefant]_{focus} hat einen Ballon. *Only* [the elephant]_{focus} has a balloon.

Regarding information structural properties, sentences (1) and (2) differ in two main aspects: first, the sentence position of the focused element – initial vs. final; second, the grammatical function of the focused element – subject vs. object. Thus, it is unclear whether the weaker performance on (2) is due to the sentence initial position of the focus or to the non-typical focus-subject assignment.

To address this question we conducted a comprehension experiment using canonical (1&2) and non-canonical FP-sentences (3) containing the focused constituent in either sentence final (1&3) or sentence initial position (2).

(3) Einen Ballon hat *nur* [der Elefant]_{focus}. A balloon has *only* [the elephant]_{focus}.

If children associate the sentence final position with focus we expect a better performance on (1) and (3) than on (2). In contrast, if children associate objects with focus and subjects with topic we expect a better performance on (1) than on (2) and (3).

Using a truth-value-judgement task each participant saw one picture at a time and had to decide whether an auditorily presented sentence matched the picture (see figure 1). Because only the expected no-responses reflect the understanding of *nur*, this response condition was relevant for analyses.

The experiment was administered to 48 6-year-olds (mean: 6;9) and 18 adults. 48 test sentences (incl. controls without *nur*) were presented to each participant.

Adults interpret all sentence types target-like. Children’s performance for sentence type (1) was at ceiling, but performance on sentences (2) and (3) differed significantly from the adults (all $p < .05$). Children performed significantly better on sentence (1) than on sentences (2) and (3) ($p < .001$; $p < .05$), no differences were found between sentences (2) and (3) ($p = .085$).

To conclude, we assume that the different performance on sentence types (2) & (3) vs. (1) is due to differences in the information structure of the sentences and not due to the position of the FP. We argue that children have difficulty with sentences with a focused subject because this leads children to a conflict of assigning topic or focus to the subject (cf. Molnar 1999).

Figure 1 – Testdesign

	expected yes-response	expected no-response
Test sentence (1) Canonical focused object	 <p>test-sentence: Der Elefant hat nur einen Schlitten. <i>Only the elephant has a toboggan.</i></p>	 <p>test-sentence: Die Ente hat nur ein Boot. <i>Only the duck has a boat.</i></p>
Test sentence (2) Canonical focused subject	 <p>test-sentence: Nur der Maulwurf hat eine Schaufel. <i>Only the mole has a shovel.</i></p>	 <p>test-sentence: Nur die Ente hat ein Buch. <i>Only the duck has a book.</i></p>
Test sentence (3) Non-canonical focused subject	 <p>test-sentence: Einen Drachen hat nur der Elefant. <i>A kite has only the elephant.</i></p>	 <p>test-sentence: Ein Boot hat nur die Ente. <i>A boat has only the duck.</i></p>

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