

Overcoming performance issues: Children respect presuppositions of “the”-expressions

Elicited production studies have suggested that children up to the age of 5 sometimes use singular “the”-expressions in non-adult-like ways, i.e., when the referent is not familiar to interlocutors^{[1][2][3]} or not unique^{[4][5][6]}. However, unnatural settings in prior studies may be responsible for children’s production errors, as children show evidence of adult-like usage in natural production^[7]. We present a new elicitation-through-conversation study that creates a more natural production setting and find that 4-year-olds are sensitive to the presuppositions of “the” even in elicited production.

Our task requires participants to consider the perspective of a listener and judge whether, within the domain of mutually known referents, the intended referent is the unique satisfier of the noun in the description. Kermit is unable to see objects on the other side of a wall, which are visible to participants (Figure 1A), and asks participants “what do you see?” (Question 1). We expect this to elicit indefinite answers (e.g., “two bags” or “a bottle and a mug”), since the referents are not in the visual common ground. Elmo then appears in front of the wall and takes away one of the two objects, while laughing. Kermit asks “what happened?” (Question 2), eliciting expected definites for unique referents (e.g., “Elmo took the mug” when there is just one mug) but indefinites for non-unique ones (e.g., “Elmo took a bag/one of the bags” when there are two). Specifically, we adopt a 2 (Uniqueness) \times 2 (Question: 1 vs. 2) \times 2 (Age: adult vs. children) design where all comparisons are within subjects. If children have adult-like knowledge of “the”, we expect their proportion of definites to vary as a function of Uniqueness and Question but without interaction with Age.

Our results indicate that children ($N = 12$; target $N = 24$), just like adults ($N = 12$), respect the presuppositions of “the”. They (mean age = 4;6;28, range = 3;10;21 - 5;0;4) never used definites when intended referents were unfamiliar to the listener; they mostly used definites (94.4%; adult control: 98.6%) to refer to a unique referent and much less so (25.8%; adult control: 25%) for a non-unique one (Figure 1B, 1C, 1D). A 2 \times 2 \times 2 mixed ANOVA confirms children’s adult-like use of referring expressions. We find significant main effects of Uniqueness ($F(1, 22) = 71.885, p < .001$) and Question ($F(1, 22) = 211.391, p < .001$) but not Age; the interaction is significant between Uniqueness and Question ($F(1, 22) = 71.885, p < .001$) but not with Age.

Our findings suggest that rates of “the”-misuse in past studies may have been boosted by misleading elicitation settings. The settings often make a referent uniquely salient, allowing definite reference even when it is not the sole satisfier of the noun in the broader context. By controlling for this and incorporating natural turn-taking, we find that children show adult-like production of referring expressions. This implies, contrary to prior work, that we have little reason to believe that children have the wrong meaning for “the” or lack the pragmatic capacity to use it properly.

(500 words)

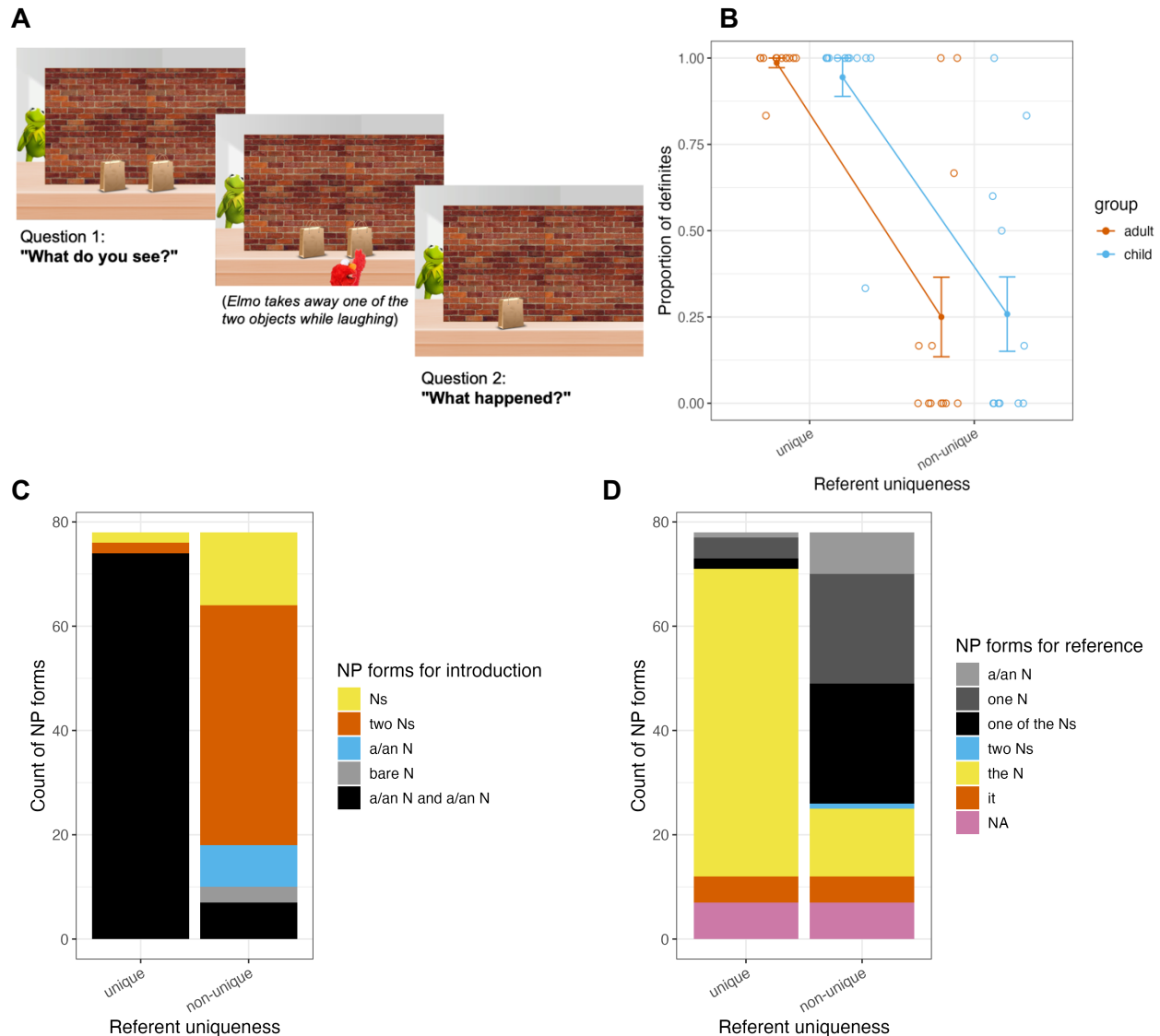


Figure 1. A: Experimental setup. B: Proportions of definites for Question 2 (children vs. adults). C: NP forms children used for Question 1. D: NP forms children used for Question 2.

References

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