

On children's perception of overspecification in referring expressions

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Introduction

In everyday language, listeners are often confronted with speakers referring to specific objects. Previous research has shown that referring expressions are often overspecified and often contain redundant attributes of the target, which - at first sight - seems inconsistent by what would be predicted on the basis of the Maxim of Quantity (Grice, 1975). Since language partners are assumed to be cooperative, the listener will regard the redundant information as informative (Levinson, 2000). However, one can think of situations where overspecification causes the listener to make false implicatures in the sense of Grice (1975). The question is to what extent these false implicatures influence the listener. In this respect, overspecification is known to facilitate target identification (Engelhardt et al., 2006). Also, speakers might have other reasons to provide their listeners with redundant information. In the current study, we therefore investigate how redundant information influences listeners' choices for certain objects. More specifically, we study the effects of overspecification on child listeners, which is interesting because children's pragmatic capabilities are under development (Davies & Katsos, 2010). In order to investigate the effect of redundant information on child listeners, we conducted a comprehension experiment, in which we confronted children of two different age groups with descriptions of sweets. We expect that the kind of redundant information that is provided in a description (either objective or affective information, or a combination of the two) influences children's choices for certain sweets, and that six and nine-year-old children differ in the choices that they make.

Method

Participants were twenty-two six-year-old children and twenty-seven nine-year-old children. The experimental trials consisted of pictures of two sweets that were placed next to each other. In the critical trials, the two sweets were of the exact same kind (see figure 1). All the trials were accompanied by pre-recorded descriptions of the two sweets. Since the sweets were completely identical, all the information provided in the descriptions was redundant, and therefore could cause children to make false implicatures.

The descriptions of the sweets were presented as questions that always had the following structure: "Do you prefer this sweet or this sweet?" First, a picture of the two sweets was shown, during which the first part of the question was played: "Do you prefer..." After that, the description of the left sweet was played. During this description, the corresponding sweet was highlighted with a red arrow (see the middle picture of figure 1). Once the left sweet had been described, a description of the right sweet followed (see the right picture of figure 1). After having heard the two descriptions, a child had to decide which sweet she preferred.

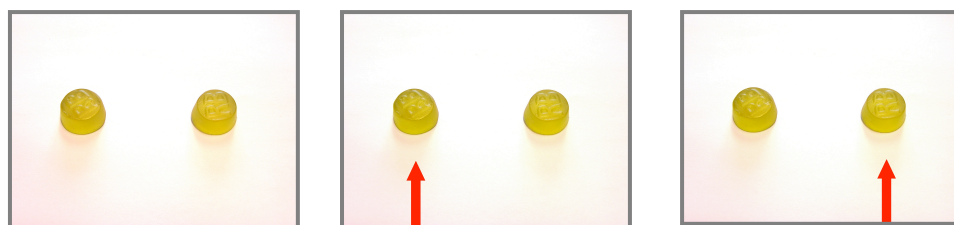


Figure 1: Example of a critical trial. The trial started and ended with the left picture. In between, the middle and right pictures were presented (highlighting the left and right sweet).

The experiment contained some crucial manipulations regarding the information that was provided about the sweets in the descriptions. The experiment had six conditions in total (as displayed in table 1 on the next page), which differed in terms of the modifiers that were used to describe the sweets. In the *objective information* condition, the sweets were described in

terms of their shape or colour, while the sweets in the two *affective information* conditions were described in terms of their taste (either positively or negatively). In the *objective affective information* conditions, the two kinds of information were combined. In the *baseline* condition, neither of the two sweets was described with redundant information. In table 1, examples of descriptions that were used in the six conditions are displayed. There were six pictures of identical sweets used in the six conditions (giving rise to thirty-six critical trials). Furthermore, the experiment contained thirty-six fillers.

Table 1: Overview of the experimental conditions and examples of descriptions in critical trials.

Condition	Example trials: "Do you prefer..."
Baseline (no information)	"... <i>this</i> sweet or <i>this</i> sweet?"
Objective information	"... <i>this green</i> sweet or <i>this</i> sweet?"
Positive affective information	"... <i>this delicious</i> sweet or <i>this</i> sweet?"
Objective + positive affective information	"... <i>this delicious green</i> sweet or <i>this</i> sweet?"
Negative affective information	"... <i>this disgusting</i> sweet or <i>this</i> sweet?"
Objective + negative affective information	"... <i>this disgusting green</i> sweet or <i>this</i> sweet?"

We investigated to what extent children of the two age groups were influenced by the redundant information in their choices. Only one sweet per trial was redundantly described; the other sweet was described as "*this* sweet". Whether the left or right sweet was described with redundant information was counterbalanced over conditions.

Results and discussion

Figure 2a visualizes the results for the baseline condition, and figure 2b depicts the children's choices for redundant descriptions per experimental condition.

Figure 2a: Percentages of choices for the left sweet in the baseline condition.

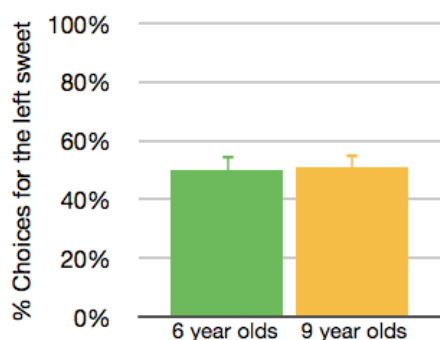
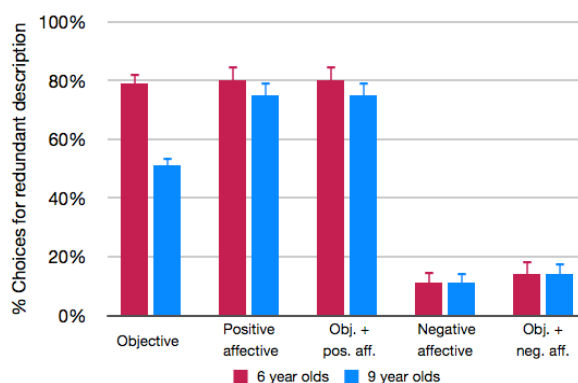


Figure 2b: Overview of the children's choices per experimental condition for each of the two age groups.



The most important difference between the two age groups was that six-year-old children are more likely to choose the sweets that were described with objective modifiers as compared to nine-year-old children ($F_{(1,47)} = 35.218, p < .001$). However, these differences did not hold for the conditions where affective modifiers were presented to the children. The results in the baseline condition did not show a bias for left or right in either of the two age groups.

Overall, the results show that that the choices of the younger children are affected by both objective and affective redundant information, while the older children are only sensitive to affective redundant attributes. These results suggest that redundant information changes the way in which children perceive specific objects.

References

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