

Children’s processing of metonyms: The eyes know more than the mouth

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Introduction: Metonymy is a communicative device in which the speaker exploits associative conceptual links in making a reference, for instance to a person playing the first violin as “the first violin”. Similar to other types of figurative language such as metaphor and irony, the comprehension of metonyms appears to be pragmatically challenging for children due to the discrepancy between what is communicated and the literal meaning of the utterance. The few previous studies on metonymy acquisition suggest some understanding in preschool children, but the number of children tested is low and the results to some extent conflicting (Falkum, Recasens, & Clark, 2016; Nerlich, Clarke, & Todd, 1999; Rundblad & Annaz, 2010; Van Herwegen, Dimitriou, & Rundblad, 2013). Moreover these previous studies used exclusively offline measures so that information about the time course of children’s metonymy processing is still missing. In our experiment, we investigated which interpretations children consider during the online processing of metonyms and compared the gaze data with the results of an offline picture-selection task.

Methods: We tested 46 Norwegian children between 3 and 6 years as well as 21 adults. Participants see four pictures (see Fig. 1), accompanied by an orally presented story which contains a word like “vacuum cleaner” used either as a metonym (1) or with its literal meaning (2):

- (1) Metonym: “Here are two women who work in the house. The *vacuum cleaner* hurries up.”
- (2) Literal: “Here are two things one has in the house. The *vacuum cleaner* makes a lot of noise.”

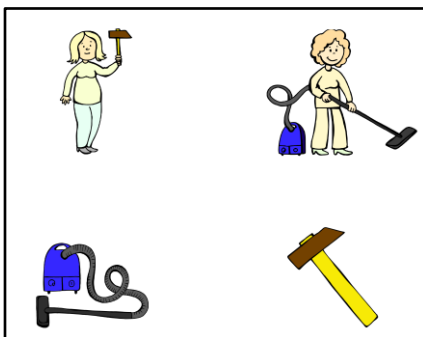


Fig. 1. Example picture

After each story, participants are asked to point to the correct picture and to justify their choice. In total, 20 test items per participant are presented (10 metonyms, 10 literal).

Results and Discussion: The offline and online data paint a very different picture of Norwegian children's ability to interpret metonyms. In contrast to adults, children chose the metonymic target picture (woman with vacuum cleaner) not significantly more frequently than the competitor picture (vacuum cleaner). However, while the sentence containing the metonym unfolds, children preferred looking at the correct picture. We argue that the gaze data provide evidence of children's early metonymic ability which precedes a full-fledged, conscious comprehension of metonymy several years later.

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