

Language learning and use is a fundamentally social behavior – when children hear ambiguous or novel words they can rely on social information to infer meaning (e.g., Tomasello, 2008; E. V. Clark, 2009). As discourse unfolds, interlocutors build up common ground - a set of shared knowledge and beliefs -

an ambiguous pronoun to refer to one of the objects (“Look at that, can you touch ?”). Children could identify the referent of the pronoun by assuming that the speaker continues to talk about objects from the same category as they did previously (vehicles in the example above). However, in order to do so, children had to infer the category by which all of the previous objects the speaker mentioned were grouped.

The dependent variable in all analyses was whether the object chosen at the test trial was from the same category as the objects named throughout the training rounds. We found little evidence that 2-year olds performed above chance (mean = 0.42,  $BF_{10} = 0.59$ ) but found substantial evidence for 3-year-olds (mean = 0.60,  $BF_{10} = 90.77$ ) and 4-year-olds (mean = 0.55,  $BF_{10} = 10.39$ ). Thus, based on hearing a speaker consistently refer to objects from a certain category, children as young as age 3 interpreted the ambiguous pronoun as referring to another object of the same category. This suggests that children track common ground with a speaker not just in terms of remembering what has been talked about previously, but also in the form of an overarching topic that guides the conversation and allows predictions about what will be talked about in the future.

In study 2 we tested whether these judgments were specific to particular speakers. 30 3-year-olds and 30 4-year-olds participated in study 2. Children carried out the same task as in Study 1. However, in half of the critical trials it was the same speaker who produced the ambiguous pronoun (“Can you touch ?”) as the speaker who presented the training trials and in the other half of the critical trials, it was a new speaker.

We tested the effect of speaker change on children’s discourse inferences via a model comparison. We compared a base model including only age as a fixed effect to models including