

Preschoolers attend to a speaker's knowledge when learning words

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INTRODUCTION

Previous research has shown that children will follow the gaze direction of a speaker to determine the meaning of a novel label even when the referent is hidden to the child (Baldwin, 1993) and when the referent is hidden to both the speaker and the child (Akhtar & Tomasello, 1996). In these studies, the preschoolers did not have to disregard their own knowledge when interpreting the novel word, because the objects were hidden to them. There is some evidence that children find perspective-taking difficult in language tasks when the child can see objects that are hidden to the speaker (Epley, Morewedge & Keysar, 2004).

In the present research, we examine whether 4-year-olds are able to learn novel words even when they must disregard their own knowledge and take into account the speaker's more ignorant perspective. In three studies, we explore whether 4-year-olds will use a speaker's visual perspective, her knowledge of an object's location, or her perceptual access to object properties when learning a new word.

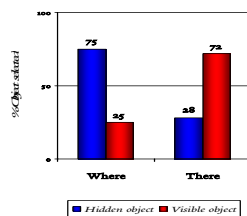
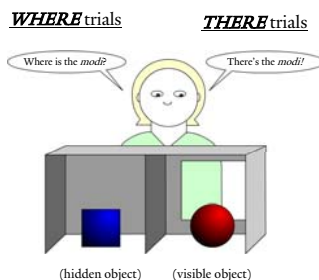
EXPERIMENT 1: VISUAL ACCESS

32 preschoolers (mean = 4;1)

1. Two novel objects are introduced.
2. Speaker leaves.
3. Objects are placed in the screen
4. Speaker returns, looks at visible object

Where trials: Where's the *modi*? Can I have the *modi*?

There trials: There's the *modi*! Can I have the *modi*?

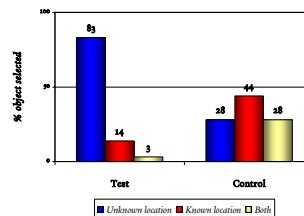
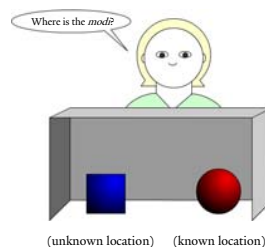


Results: Children performed above chance on both *Where* and *There* trials. This suggests they were sensitive to the speaker's visual perspective.

EXPERIMENT 2: KNOWLEDGE

18 preschoolers (mean = 3;10)

1. Show two novel objects.
2. Speaker places one object behind the screen, leaves the other in plain view. (*Control* trial: Speaker leaves both in plain view.)
3. Speaker leaves. Objects are placed in the screen.
4. Speaker returns, asks: "Where's the *modi*? Can I have the *modi*?"



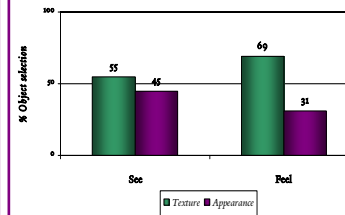
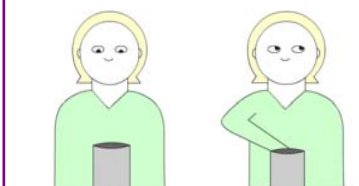
Results: Children chose the object whose location was unknown to the speaker more than chance. When the speaker was ignorant about the location of both objects, children were at chance.

EXPERIMENT 3: PERCEPTUAL ACCESS

32 preschoolers (mean = 4;4)

1. Explore target and test objects.
2. Speaker looks away. Target is placed into tube.
3. Speaker reaches or looks into tube, says: "This is a really *daxy* one! Can I have another *daxy* one?"

SEE trials **FEEL** trials



Results: Children performed above chance on *Feel* trials, and selected the tactile match more often in *Feel* trials than in *See* trials. There was no systematic response in *See* trials.

CONCLUSIONS

When determining the referent of a new word, 4-year-olds are sensitive to:

1. A speaker's visual perspective, even with conflicting eye gaze cues.
2. A speaker's knowledge: 4-year-olds attend to what a speaker knows and does not know, and take this into account when interpreting the meaning of a new word.

In Experiment 3, it is not clear why children considered the speaker's perceptual access in *Feel* trials but not *See* trials. It is possible that this finding resulted in part from a problem with the specific materials used. Follow-up studies are underway.

When learning language, preschoolers do not simply associate the novel word with the target of a speaker's gaze. Even in cases where the speaker has a more ignorant perspective, children flexibly use their understanding of the speaker's visual perspective, knowledge state, and perceptual access when determining the speaker's intended referent.