When (or when not) to adopt her view? Four-year-olds consider others’ epistemic states to selectively take their visual perspectives

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Introduction

Visual Perspective Taking (VPT)

• VPT is critical for communication and social interaction.
• However, it is difficult for young children.
  - Children (and even adults) commit “egocentric errors” in perspective taking tasks (e.g., Keysar et al., 2000; Epley et al., 2004)
  - Children before 4–5 yrs of age fail to report what the same object looks like from others’ viewpoints when it conflicts with their visual percepts (Level-2 VPT) (e.g., Piaget & Inhelder, 1956; Flavell et al., 1981; Moll et al., 2012)

Whether VPT is appropriate and useful depends on the communicative context!

• Young children are sensitive to others’ epistemic states and goals, and use them to selectively inform others (e.g., Moll, Carpenter, & Tomasello, 2007; Liszkowski et al., 2008; Gweon, Shafo, & Schulz, 2014, Gweon, Chu, & Schulz, 2014)
• Even though VPT is difficult, children might spontaneously take others’ perspective when it is helpful for others!

Central Question: Do 4-year-olds consider others’ epistemic states and goals to decide when to take others’ perspectives?

Experiment 1

Are 4-year-olds (and adults) more likely to spontaneously take another’s visual perspective when they are teaching than when they are being taught?

Participants directly responded to the puppet’s question.

Experiment 1a: 4-yr-olds

Experiment 1b: adults

![Graph showing % of perspectives](image)

Experiment 2

Do 4-yr-olds appropriately evaluate others depending on when they took their own vs. another’s visual perspective?

![Graph showing % of perspectives](image)

Experiment 3

Can 4-yr-olds (or even younger children) actively manipulate objects to create perspective-specific reality?

Prediction: Children would be more likely to rotate the number to make a “6” for the puppet (“9” from their viewpoint) when she is learning from them rather than teaching them.

Conclusions & Future Directions

• Future direction: Do toddlers show spontaneous, selective perspective-taking behaviors in Level-1 VPT tasks?

References:

Gweon, H., Chu, V., & Schulz, L. E. (2014; in review). Children consider prior knowledge and the cost of information both in learning from and teaching others.