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Brief article

Two-year-olds use artist intention to understand drawings ☆

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Abstract

Adults appreciate that an abstract visual representation can be understood through inferring the artist's intention. Many investigators have argued that this capacity is a late-emerging developmental accomplishment, a claim supported by findings that preschool children ignore explicit statements about intent when naming pictures. Using a simplified method, we explored picture naming in 2-year-olds. Experiment 1 found that when an adult artist drew an object, children later mapped a novel name for the drawing to the object that the adult had been looking at. Experiment 2 suggests that this response was not merely because there was more attention given to that object. These findings are consistent with the view that children are naturally disposed to reason about artifacts, including artwork, in terms of inferred intention.

Keywords: Intention; Reference; Drawings; Language

1. Introduction

Visual representations are understood in part by inferring the intentions of their creators. Picasso's 1906 painting did not look much like Gertrude Stein; what made it a

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portrait of her was Picasso's mental state as he painted it. Similarly, a circle on a page can be understood as denoting a soccer ball, the planet Mars, or the empty set – depending on the goal of the individual who drew it. Adults are typically aware of the importance of intention; when uncertain about what a painting or drawing is supposed to depict, most people would agree that it makes sense to ask the artist – he or she is in the perfect position to know (for discussion, see, e.g., Danto, 1981; Goodman, 1968).

This focus on creator's intention might be a cultural invention, one acquired by children through experience with art and how people talk about art. In an intriguing set of studies, Richert and Lillard (2002) asked children to name drawings while providing them with explicit information about the knowledge of the artist – for instance, children would be shown a drawing that looks like a fish, but told that the artist comes from a faraway land and has never seen or heard of a fish before. When asked to name the drawing, it was only by the age of eight that children showed some sensitivity to the mental state of the artist, and realized that the drawing could not be of a fish. Richert and Lillard conclude that young children start off as natural *deconstructionists*, giving no special consideration of the intention of the artist.

There is reason to continue to explore this issue, however. For one thing, even 2-year-olds are aware of the symbolic nature of pictures, that is, they understand that a picture can be used to refer to or represent some real world entity (DeLoache, 2004; DeLoache & Burns, 1994; Preissler & Carey, 2004). For another, young children are sensitive to intention in other contexts, including word learning (e.g., Baldwin, 1993; Tomasello, Strosberg, & Akhtar, 1996), imitation (Gergely, Bekkering, & Király, 2002; Meltzoff, 1995) – and when naming pictures that they themselves draw (Bloom, 2000; Bloom & Markson, 1998). This raises the possibility that if one were to use a simpler non-linguistic cue to intention, such as eye gaze, one might find a more precocious understanding. We explore this in the two studies below.

2. Experiment 1

2.1. Method

2.1.1. Participants

Twenty native English-speaking 30-month-old children (range 26–33 months) were included in the study. There were 11 males and 9 females. Two additional children were excluded due to non-compliance, and one further child was excluded due to parental interference.

2.1.2. Materials

There were two stimuli sets, each with two novel objects and one picture that could represent either of these objects (Fig. 1).

2.1.3. Procedure

Participants were seated at a small table across from the experimenter. An empty box was located on a platform to the child's left, and an opaque container with a lid