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Children's knowledge of the relation between intentional action and pretending

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Abstract

Two experiments investigated preschoolers' understanding of the relation between pretending and intentional action. In Experiment 1, both 3- and 4-year olds recognized that characters whose actions were intended as pretense were pretending. However, children also judged that characters whose actions gave them the appearance of an entity unintentionally were pretending to be that entity. In Experiment 2, 3-year olds reliably chose a character whose pretense actions were intentional as pretending over a character whose actions were guided by another intention. These data suggest that preschoolers have some understanding of the role of intentional action in pretense.

Keywords: Pretense; Intentionality; Theory of mind

Recent research in theory of mind has investigated children's understanding of pretending. In order to recognize that another person is pretending, children must use similar representational abilities as when they recognize that another person has a false belief (Leslie, 1987; Lillard, 1993). In both cases, the other person acts in a manner contrary to what is expected given the actual state of the world. By age 3, children appear to understand when others are pretending (e.g., Harris & Kavanaugh, 1993). Success on standard false belief tasks does not emerge until sometime during the fourth year (e.g., Wellman, Cross, & Watson, 2001).

Some researchers have suggested that this discrepancy in performance can be explained by young children understanding the representational nature of pretending before they understand the representational nature of belief (Bruell & Woolley, 1998; Custer, 1996; Flavell, 1988; Forguson & Gopnik, 1988; Hickling, Wellman, & Gottfried, 1997; Leslie, 1987, 1988).[1] Other researchers,

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[1] While the representational nature of pretense and belief are similar in structure, it is certainly possible they rely on different or multiple substrates. Leslie and Roth (1993), for example, suggested that false belief and pretending abilities

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however, argue that preschoolers do not understand the representational nature of pretense. Rather, young children interpret pretending as "behaving-as-if"—more dependent on a person's actions than mental states (Harris, 1991; Harris, Lillard, & Perner, 1994; Lillard, 1993, 2001; Lillard, 1994; Perner, 1991).

Much of this debate has revolved around a procedure developed by Lillard (1993): the Moe task. Children are shown Moe the troll who is hopping up and down. Children are told that Moe is hopping like a kangaroo, but since Moe is from the land of the trolls, he does not know what kangaroos are or that they hop. Children are then asked whether Moe is pretending to be a kangaroo. Lillard's hypothesis was that if children understood that pretense involved mental representation then they should recognize that Moe could not pretend to be something that he could not represent. This was not the case: only ∼35% of 4-year olds claimed that Moe was not pretending. In contrast, the majority of these children passed standard false belief tasks. The findings in support of the "behaving-as-if" hypothesis are quite robust: in addition to multiple replications of the Moe procedure (see Lillard, 2001), 4-year olds do not appreciate that pretending involves the use of one's mind in the same way adults do (Lillard, 1996; Richert & Lillard, 2002; Sobel & Lillard, 2002).

Do preschoolers treat all "behaving-as-if" action as pretending, or do they recognize that acts of pretense must involve intentionality on the pretender's part? To examine this question, Lillard (1998) told 4-year olds about a character who was jumping up and down like a kangaroo, but who was not trying to be a kangaroo. The majority of children stated that this character was pretending to be a kangaroo. Even when provided with an explanation for the character's actions (e.g., he is jumping up and down because the pavement is hot), children judged that the character was pretending (Richert & Lillard, 2002). Similarly, Ganea, Lillard, and Turkheimer (2004) showed 4- and 5-year-olds videos about actors who each stated a particular goal (e.g., a woman who wanted to find her keys). To accomplish this goal, the actor took on the appearance of an animal (e.g., she got down on all fours to look for her keys, and was moving around like a bear). Ganea et al. (2004) found that most children claimed the actor was pretending to be that animal (i.e., a bear). They also found that these same children judged actors who intended their actions as pretending to be pretending. This suggests that young children do not distinguish between intentional and unintentional behaving-as-if actions: both were considered pretending.

However, there is some evidence that young children do appreciate this difference. Ganea et al. (2004, Experiment 3) demonstrated that under some conditions, 4-year olds recognized that not all behaving-as-if actions were pretending. They showed children the same video of the actor who wanted to find her keys, but in the process of looking for them, incidentally took on the appearance of a bear. When asked whether this character was pretending to be a bear or looking for her keys, the majority of children did not choose pretending.

These data are consistent with Joseph (1998), who found that 3-year olds claimed a character who was pretending to be sick and sneezed intended to sneeze, while a character who was really sick and sneezed did not intend her actions. Similarly, Rakoczy, Tomasello, and Striano (2004) found that 3-year olds responded differently to demonstrations of pretend actions (e.g., pretending to write) and "trying" actions, in which an actor tried to perform an act, but failed to do so (e.g., trying to write with a capped pen). Children pretended (and did not actually perform the action)

share certain representational features, but that reasoning about false beliefs has inhibitory demands that pretending lacks. Examining these possibilities, however, seems beyond the scope of the present investigation.