

## How Do Children Represent Pretend Play?

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### **Abstract**

How do young children represent pretend play? One possibility is that recognizing and representing pretend play depends on children's ability to infer the mental states of the person engaged in pretend play (mentalist account). The two dominant alternative possibilities are that children view as a distinctive form of non-representational behavior (behavioral account), and that children represent pretense by temporarily treating objects as though they have fictional or make-believe properties (flagging account). This chapter provides an overview of the debate between these three accounts of pretend play, but then endorses a fourth position according to which children view pretend play as a form of communication, similar in many ways to drawing.

**Keywords:** cognitive development, communication, concepts, mental states, pretense, representational activity, theory of mind

Like many human activities, pretend play has behavioral and mental components. Consider a child pretending to drink juice from an empty cup. He lifts the empty cup close to his mouth, tilts the cup back comically, and makes loud slurping noises. The child produces these distinct behaviors because of his mental states, whereby he intentionally misrepresents the empty cup as containing juice. Other children who see this behavior will recognize it as pretense. If the child pretends to pour juice into an empty cup, other children will expect him to “drink” from that cup. They would be surprised if he instead drank from a different cup, even though both are empty. This ability to recognize pretense appears as early as 15 or 16 months (Bosco, Friedman, & Leslie, 2006; Onishi, Baillargeon, & Leslie, 2007), with children recognizing increasingly more sophisticated forms of pretense as they enter the preschool years (e.g., Harris, Kavanaugh, & Meredith, 1994; Walker-Andrews & Harris, 1993). How do children do recognize and represent pretend play? Do they consider overt behaviors of pretend play *and* the mental states that underlie and cause these behaviors? Do they consider the behaviors alone? Or is there some other way they can recognize pretense?

As these questions show, pretend play provides a window onto young children’s representational abilities. If children consider mental states in representing pretend play, then their ability to represent pretend play is a form of mental state reasoning or theory of mind (Leslie, 1987). Alternatively, children might view pretense only as a distinctive form of behavior, at least until they are about five or six years of age (e.g., Lillard, 1993a; see chapter 10). Or children might represent pretense by treating objects as though they temporarily have fictional identities and properties (Harris & Kavanaugh, 1993). These three positions offer differing claims about how children represent pretend play and they are also compatible with differing accounts of cognitive development and young children’s representational abilities. This chapter provides an admittedly biased overview of the debate among these three positions, and then endorses a new account according to which children view pretend play as form of communication.

The remainder of this chapter proceeds as follows. First we outline the claim that children are mentalists about pretend play, with discussion of evidence that is often viewed (mistakenly, in my opinion) as contradicting this account. Next we review and critique the claim that children view pretense solely in terms of the overt behaviors produced. Then we discuss the view that children recognize pretend play by temporarily representing objects as having fictional properties and identities. Finally we return to the mentalist account. Although this account succeeds in explaining essential features of children’s pretend play, new challenges are raised, and an alternative “communicative” account is proposed, according to which children view pretend play as a form of communication.

### **The Mentalist Account**

According to the mentalist account, young children’s ability to represent pretend play is an early emerging form of theory of mind (Leslie, 1987, 1994). To understand this claim, it helps to begin by briefly discussing mental states and theory of mind. Mental states such as *believe*, *hope*, *imagine*, *intend*, and *want* are propositional attitude mental states. Each relates an agent (e.g., Max) to a propositional content (e.g., the cup contains juice). Thus, Max might believe that the cup contains juice, or he might hope, imagine, want, or intend this.<sup>1</sup> Which mental state Max has in regard to the juice depends on how Max represents the world, rather than on how the world actually is. Max could believe (or hope, or imagine) that a certain cup contains juice even if the cup is actually empty, or even if there is no such cup. (Perhaps Max has made a mistake, and the

“cup” is actually a small vase.) What differs for these different mental states is the attitude Max takes to the propositional content “There is juice in the cup.”

Theory of mind is the ability to reason about and represent such propositional attitude mental states.<sup>2</sup> It is widely agreed that attributing a mental state implies possession of the corresponding mental state concept. For example, if Sally represents Max as believing something (e.g., that the cup contains juice), this implies that she possesses the concept *believe*. And because beliefs are representational, when Sally attributes a belief to Max, she represents him as representing, and thus engages in meta-representation.

Researchers interested in the relationship between pretense and theory of mind often ask whether engaging in pretense facilitates the development of theory of mind, and whether doing so sometimes requires children to consider others’ intentions, thoughts, and beliefs (e.g., Astington & Jenkins, 1995; Rosen, Schwebel, & Singer, 1997; Schwebel, Rosen, & Singer, 1999; Taylor & Carlson, 1997). These questions concern the relation between pretense and theory of mind abilities that are distinct from pretense. In contrast, the view that children are mentalists about pretense posits a much closer connection between pretense and theory of mind; it claims that representing a person as pretending *is* a form of theory of mind.

The basis of this claim is that *pretend* is a propositional attitude mental state. Just as Max might believe, hope, or imagine that some cup contains juice, he can also pretend this. *Pretend* shares key properties with propositional attitude mental states, such as *believe*. If Max mistakenly believes the empty cup contains juice, then he misrepresents its content. The same is true if Max knowingly pretends that it contains juice. There are of course many differences between *believe* and *pretend*. For instance, it is possible to believe without being able to represent oneself or others as believing, but it does not seem possible to pretend without having the ability to represent pretense (Leslie, 2002, p. 107). But there are also many differences among all of the various propositional attitude mental states. The main point is that the mentalist theory claims that *pretend* is a mental state, and this means that the concept *pretend* is a mental state concept.

As noted, children age 15 and 16 months recognize others’ pretense. Just as attributing beliefs depends on the child’s possession of the mental state concept *believe*, the mentalist account posits that recognizing pretense depends on the child’s possession of the mental state concept *pretend*. When Sally recognizes Max’s pretense, she uses this concept to represent, *Max pretends the cup contains juice*. By entertaining this representation, Sally represents Max’s mental state of pretending, and thereby engages in theory of mind.<sup>4</sup> In doing so Sally also engages in meta-representation; in representing Max as pretending, Sally represents him as representing.

The mentalist account claims that recognizing and representing Max’s pretense requires Sally to use the mental state concept *pretend*. But how does Sally come to recognize what Max is pretending? According to the mentalist account, Sally’s ability to do so requires her to interpret the behaviors he produces on the basis of his pretense. In pretending the cup contains juice, it would be odd if Max produced the exact actions he would take if juice were really in the cup. If Max closely mimicked real drinking, Sally would have difficulty recognizing his pretense, and might wrongly judge that he actually believes the cup contains juice.<sup>5</sup> Rather than behaving normally, Max instead lifts the empty cup close to his mouth without actually having it touch his mouth, tilts it back comically, and makes loud slurping noises. These actions feature manner cues typical of pretense, including exaggerated motions, and knowing looks and smiles (e.g., Lillard & Witherington, 2004). Max’s actions are suggestive of there being juice in the cup, but

are not likely to lead Sally or anyone else to think that there really is juice in the cup, or that Max believes there is. Thus, Max's distinctive behavior expresses both *that* he is pretending, and also *what* he is pretending (e.g., this cup contains juice, and I drink it). On this view, Sally recognizes Max's pretense because she realizes that he is not behaving regularly (i.e., behaving on the basis of his actual beliefs and desires about the world), and that his behavior is better explained by supposing that he is trying to express what he pretends. For extended discussion of this view of how children recognize pretense, see Leslie and Happé (1989).

### **Against the Mentalist Account, and Moe the Troll**

The claim that children are mentalists about pretense has aroused much skepticism because if children's representation of pretense requires their possession of the mental state concept *pretend*, this implies that 15- and 16-month-olds are already engaging in a form of theory of mind. It is difficult to see how such young children could come to possess the mental state concept *pretend* through learning, and so the mentalist account is more compatible with the alternative possibility that children are innately endowed with this mental state concept, and perhaps others, like *belief* (e.g., Leslie, 1987, 1994). The conclusion that children are innately endowed with abstract mental state concepts is unpalatable for many, and contradicts claims that the acquisition of these concepts is an achievement of the preschool years, and the result of children learning and devising theories about minds and mental states (e.g., Gopnik & Wellman, 1994; Perner, 1991; Wellman, Cross, & Watson, 2001).

This skepticism led to the development of a body of empirical work seeking to provide evidence against the mentalist account. Much of the work follows from Lillard's (1993b) influential Moe the troll experiments. In these experiments, children watch scenarios about Moe the troll who, for example, does not know what a kangaroo is, but who is nonetheless described as jumping up and down like a kangaroo. Children are asked whether Moe is pretending to be a kangaroo. For adults it is obvious that a person pretending to be a kangaroo must know about kangaroos, and is likely to be thinking about being one. But children age four and five often claim that Moe pretends to be a kangaroo, even while admitting that he does not know what a kangaroo is, and that he is not thinking about being a kangaroo. For Lillard (1993b, 2001) these findings suggest that children focus on Moe's behavior (jumping up and down) in deciding whether he is pretending and neglect to consider the mental states that underlie this behavior. From the claim that children seem oblivious to the mental states underlying Moe's behavior when he pretends, it is concluded that children are not mentalists about pretense.

Many experiments have followed up Lillard's (1993b) original Moe the troll findings, with some experiments replicating four- and five-year-olds' difficulty, and others suggesting that children at these ages can succeed in modified versions of the task (see Lillard, 2001 for an excellent review of much of this work). But aside from the question of *when* children first correctly reason about the knowledge, thoughts, and intentions that are required for pretending, is the separate question of whether any of these findings actually bear, as they are often claimed to, on the mentalist account.

The Moe the troll task suggests that children are not aware of certain mental states that accompany pretending, such as knowledge of kangaroos, and thoughts about being a kangaroo. However, the mentalist theory does not claim that children are aware of all the mental states that accompany pretending, or that might be necessary for pretending. The theory only claims that *pretend* is itself a mental state, and that children's recognition of pretense requires that they possess the mental state concept *pretend*. So the theory is not contradicted by demonstrations that children do not appreciate certain other mental states that typically accompany pretending

(see German & Leslie, 2001 for extended discussion of these points). In fact, according to the mentalist account, children engage in theory of mind even as they fail the Moe task. When children wrongly judge that Moe is pretending, they represent *Moe pretends that he is a kangaroo*. Although this judgment is incorrect (i.e., Moe is not actually pretending he is a kangaroo), the mentalist view claims that children nonetheless represent Moe using the mental state concept *pretend* and therefore attribute a mental state to him (i.e., *pretend*).<sup>6</sup>

Although findings from the Moe the troll tasks might not show that the mentalist account is wrong, they are still interesting. In failing the tasks, children show difficulty appreciating that to pretend to be X one has to know about X. Their failure suggests that they do not appreciate the connection between *know* and *pretend*, and implies a developmental course in which young children possess concepts like *know* and *pretend*, and only later come to learn relations between them (German & Leslie, 2001). If it is difficult to believe that children could possess the concept *pretend* without appreciating the connection between pretending and knowing, then consider findings from a modified version of the Moe task conducted by German and Leslie (2001). Their experiments included versions of the task that did not concern pretending at all. Instead, these tasks assessed children's attributions of beliefs. Children age four to six years watched a scenario in which a bag hops up and down because a rabbit is inside it. Children were then told about a troll who sees the hopping bag, but not the rabbit inside, and were also told that the troll does not know that there are such animals as rabbits. When asked if the troll *thinks* a rabbit is in the bag, many children incorrectly said "yes." Children's error is similar to that in the original Moe the troll task. If the troll does not know about rabbits, then the troll cannot believe that a rabbit is in the bag.

Using the standard interpretation of Moe the troll tasks, it should be concluded that children who failed this "knowing-believing" task lack the mental state concept *believe*, and are therefore not mentalists about believing, and only appreciate the behavioral component of believing. These conclusions are deeply problematic because there is no obvious behavioral component to the troll's belief that a rabbit is in the bag. Also, many children who failed the knowing-believing task passed a standard false belief task, a task that provides a conservative test of children's possession of the mental state concept *believe* (Bloom & German, 2000). So it is difficult to treat children's failure of the knowing-believing task as evidence that they lack this concept. The more plausible explanation for children's failure of knowing-believing tasks is that children have difficulty appreciating the relationship between believing and knowing, much as children in standard Moe the troll tasks have difficulty appreciating the relationship between pretending and knowing.

It seems, then, that findings from the Moe the troll task do not bear on the mentalist account. Nonetheless, some alternative theory might better explain children's pretend play. The next section outlines the dominant theoretical alternative to the mentalist account, the behavioral theory.

### **The Behavioral Account**

According to the behavioral theory, children only recognize and represent pretense as a form of behavior. Several different versions of this account have been proposed (e.g., Lillard, 1993a, 2001; Nichols & Stich, 2000, 2003; Perner, 1991; Rakoczy, Tomasello, & Striano, 2004). The current discussion of the behavioral theory relies on the version proposed by Nichols and Stich because it is the clearest and most precise proposal, and allows the implications of the behavioral theory to be made evident most easily. Nonetheless, the conclusions of this discussion are not specific to Nichols and Stich's formulation, and extend to all other versions.

The behavioral theory claims that young children (e.g., less than four years of age) lack propositional attitude mental state concepts. To the extent that these children reason about pretense, it is only as a form of behavior. According to the behavioral account, when Max raises an empty cup to his lips and makes slurping noises, Sally will not be able to represent that Max pretends there is juice in the cup (and that he drinks it). Representing Max as pretending this would require Sally to possess the propositional attitude concept *pretend*, and as a young child Sally lacks this.

Instead, Sally is claimed to view instances of pretending P via the behavioral description, *behaving in a way that would be appropriate if P were true* (Nichols & Stich, 2000, 2003).<sup>7</sup> For instance, to make sense of what Max does with the cup, Sally might represent, *Max behaves in a way that would be appropriate if the cup contained juice*. This account may seem compelling because if there were juice in the cup, then Max might drink it, in which case it would be appropriate for him to raise the cup to his lips and make slurping sounds. This same behavioral description is used to explain why Max produces the behaviors he does. He does so because he has decided to behave in a way that would be appropriate if the cup contained juice.

### **Difficulties for the Behavioral Account**

Although the behavioral theory seems to provide a simple account of how children engage in and recognize pretend play, it faces many problems (see Friedman & Leslie, 2007 for an extended critique of the behavioral theory). One set of problems arises because the behavioral theory is too broad, and predicts that children will view many non-pretend behaviors just as they view genuine instances of pretending. A second set of problems arise because the account is too narrow—many common forms of pretense do not fit the behavioral description and on this account should neither be produced nor recognized by children.

Just about any behavior can be viewed as *behaving in a way that would be appropriate if P*. Suppose Max is drinking tea and he uses a straw to stir the tea. Sally might represent, *Max is behaving in a way that would be appropriate if the straw were a spoon*. Even though he is not pretending, and is just stirring, the behavioral theory predicts that Sally will represent Max just as she would if he were actually pretending. More precisely, the behavioral theory predicts that Sally will treat instances of genuine pretense as seriously as she treats everyday behaviors such as stirring coffee with a straw (because the behavioral theory makes no mention of pretense being playful). Because just about any behavior is consistent with the behavioral description, the description does not allow children to discriminate behaviors produced in pretense from ordinary non-pretend behaviors.

Contrary to this, it might seem that children should be able to differentiate pretend and ordinary behaviors because pretend behaviors are distinct in featuring manner cues (e.g., exaggerated motions, knowing smiles). And in fact, manner cues do help children recognize pretend play (Lillard & Witherington, 2004; Ma & Lillard, 2006; Richert & Lillard, 2004). However, the behavioral account makes no mention of manner cues; they are nowhere in the behavioral description, *behaves in a way that would be appropriate if P*. On the contrary, the more manner cues are incorporated into the behaviors of pretense, the less this behavior fits the behavioral description. When Max loudly slurps while pretending to drink (exaggerated behavior), he does not really behave in a way that would be appropriate if he were drinking. People do not usually slurp loudly when drinking. Perhaps the behavioral account could be modified to incorporate manner cues. However, it is challenging to think of how to do this in a way that is not clumsy and post hoc. In contrast, manner cues fall naturally out of the view that

children are mentalists about pretense because in that account, people engaging in pretense seek to behave in a way that expresses they are pretending and not just behaving regularly.

Further difficulties arise for the mentalist account because it is too narrow. Commonly occurring forms of pretend play do not fit the behavioral description, and so it has difficulty explaining how children recognize (and produce) these forms of pretense (see chapter 12 for a taxonomy of different types of pretend play). Pretend play scenarios often involve the representation of some agent who carries out an action. Sometimes a person serves as the agent. For example, when Max pretends there is juice in the cup, *he* carries out the action of drinking. The behavioral account is most compelling in such instances (i.e., in which the person enacting the pretense serves as the agent). When Max raises the cup to his lips, it might seem plausible that Sally could view him as behaving in a way that would be appropriate if the cup contained juice (although again, if he was *really* going to behave appropriately he would touch the cup to his lips).<sup>8</sup>

The behavioral account has considerable difficulty, though, when an object serves as the agent. If Max puts the cup to a teddy bear's lips and makes slurping noises, Max still pretends the cup contains juice, but now the teddy bear (an object) is the agent carrying out the action of "drinking." Likewise, if Max pushes a block of wood along the table while he says "vrrrm," he pretends that the block is the agent carrying out the actions of driving and of making the "vrrrm" sound. However, when Max does these things, his behavior does not correspond with the behavioral description, and so the behavioral theory is unable to explain why Max produces these commonly occurring pretend behaviors, nor how Sally and other children might interpret them. Consider first the act of pushing the block on the table in pretending it is a car. According to the behavioral theory, Sally can make sense of Max's behavior by representing that he behaves in a way that would be appropriate if the block were a car. However, in moving the block, Max does not behave himself in a way that would be appropriate if it were a car. People do not normally move cars by pushing them. For Max to behave in a way that would be appropriate if the block were a car, he might open and shut its doors, sit in it, drive it, or honk its horn, although none of these actions can actually be carried out with a wooden block. So Sally is left with no way to understand why Max moves the block. It could be that the behavioral account could be expanded to help explain why Max moves the block (see Friedman & Leslie, 2007 for some suggested fixes), but greater difficulties concern why Max says "vrrrm" while pushing the block.

When Max makes "vrrrm" sounds while pushing the block, he pretends these sounds are made by the block/car. Pretend play often involves such sounds, which are represented as being made by an object (i.e., rather than by the person actually making them). Such pretend sounds are problematic for the behavioral theory because when Max goes "vrrrm" he does not behave in a way that would be appropriate if the car were making those sounds. If the car were making "vrrrm" sounds, then Max would probably be silent, and there would be no reason for him to make them. It might make sense for Max to make "vrrrm" sounds when he pretends to be a car, but this is not what he pretends when he pushes the block. Hence, Sally cannot successfully interpret Max's behavior via the original behavioral description, and so she will be left viewing Max alone, and not the block/car, as the source of the "vrrrm" sounds.

This difficulty for the behavioral account extends to pretend speech. Suppose Max holds a teddy bear, and lightly shakes it, while saying in a gruff voice, "I'm hungry, give me food." In behaving in this way, Max pretends that the bear is the one speaking and making the request. If Sally comprehends this pretense, she should fulfill the request by "feeding" the bear. However, if



the behavioral theory were correct, then it would be difficult to see how Sally might comprehend the request. As with the example of the block/car, Max cannot be viewed as behaving in a way that would be appropriate if the bear were making the request. If the bear were making the request, it might be appropriate for Max to listen to the request, or respond to the request. But there is no reason why he should utter the request himself. In uttering the request Max might be viewed as behaving in a way that would be appropriate if *he* were a teddy bear making the request. But if Max's behavior were interpreted in this way (which would be odd given that teddy bears cannot speak), Max would still be viewed as the source of the request. So the request would have to be fulfilled by "feeding" Max and not the bear, opposite to what should happen with the pretense that the bear is the speaker.

It is difficult to see how the behavioral theory might be modified or expanded to explain how children comprehend pretend sounds and speech. As an alternative, the theory could be defended by denying that children do comprehend pretend sounds and speech. Until recently no research investigated children's comprehension of pretend sounds and speech, and the little existing research found that pretend sounds do not improve recognition of pretense in 18-month-olds (Lillard & Witherington, 2004), and barely improve recognition in older children (Richert & Lillard, 2004). Thus, it seems possible that young children might ignore these sounds, or only loosely associate them with the accompanying actions.

However, recent findings confirm that two- and three-year-olds do understand what a pretender is trying to accomplish with pretend speech (Friedman, Neary, Burnstein, & Leslie, 2010). In a series of experiments, two- and three-year-olds sat before the experimenter and a teddy bear, who each had a box. Children were given Lego blocks, and then heard the experimenter utter requests to "put a block in my box." The experimenter sometimes uttered the requests normally, and other times with the pretense that the bear was speaking. On the "pretend" trials, the experimenter spoke in a gruff voice while lightly moving the bear. Children at both ages correctly placed blocks in the experimenter's box when she spoke normally, and in the bear's box in the pretend trials. It cannot be that children only put blocks in the bear's trial because they were cued by the experimenter moving the bear. In one experiment, the bear was also moved in the reality trials (i.e., with the experimenter speaking in her regular voice), and children still correctly put the blocks in her box. Findings from the pretend trials instead suggest that children shared in the experimenter's pretense that the bear was speaking.

The behavioral account cannot explain children's success in this experiment. If children represented pretense via the behavioral description, they could not interpret requests in pretend trials as coming from the bear. Children's success is easily explained, however, by the mentalist account. According to this account, children succeeded because they were able to represent the experimenter as pretending—they could represent *the experimenter (or we) pretend that the bear uttered the request "put a block in my cup."* By speaking in a gruff voice, the experimenter drew attention to her utterance, and conveyed that she was pretending that she was not the one uttering it. By shaking the bear, she conveyed that she was pretending that the bear was the one actually speaking.

In sum, although the behavioral theory is somewhat compelling for pretend play in which the pretender is an agent of the pretend actions, it quickly become convoluted when applied to other types of pretend play, and has particular difficulty with pretend sounds and speech. Moreover, the theory predicts that children should mistake many regular behaviors for instances of pretending, and fails to explain why the behaviors of pretend play typically feature manner

cues. It seems doubtful that children view pretend play via the behavioral description, *behaving in a way that would be appropriate if P were true*.

### **The Flagging Account**

Another alternative to the mentalist view is the “flagging” account proposed by Harris and Kavanaugh (1993; also see Harris, 1994, 1995, 2000). According to this account, children represent pretense by “flagging” (or labeling) objects with make-believe identities and properties. For example, when Max puts the empty cup to his lips and makes slurping sounds, he does this because he flags the cup, *this cup contains make-believe tea*. Sally also flags the cup this way, and this allows her to make sense of his behavior—Max puts the cup to his lips because he drinks the (make-believe) tea.<sup>9</sup>

Like the behavioral view, this account denies that young children represent pretense with the propositional attitude concept *pretend*, but unlike the behavioral view, the flagging account does not restrict children to representing pretense via the behavioral description. On this view, children are accorded a way of representing pretense that substantially differs from how they represent regular non-pretend behavior—only in pretense are objects flagged as having make-believe properties. Even so, the flagging account is vague in explaining why pretenders behave as they do. Why does Max not put the empty teacup to his lips if he is drinking? Only the tea was flagged as make-believe, not the drinking. Should both be flagged?

A more concrete challenge to the flagging account is posed by pretend sounds and speech. Again, Max makes “vrrrm” sounds when Max pushes the block, and all accounts of pretend play must explain why he makes these sounds, and how Sally interprets this behavior. The flagging account might claim that Max produces these sounds because make-believe cars are expected to go “vrrrm.” (This suggestion is speculative because as noted in the preceding paragraph, the flagging account is vague about how pretenders should behave.) But assuming that make-believe cars are expected to go “vrrrm,” it would only make sense for Max to make the sounds if *he* were a make-believe car (i.e., if he were flagged *Max is a make-believe car*). But when Max pushes the block, the block is the make-believe car. So it should make the “vrrrm” sounds, not Max.

Alternatively, Max and Sally might flag the sounds, *these sounds are make-believe car sounds*. But this proposal does not help. Representing the sounds as make-believe car sounds does not mean that they are made by the block/car. They would still be make-believe car sounds if Max were the make-believe car, and this would be especially plausible given that he, and not the block, makes the sounds. A further repair might be to flag the sounds, *these sounds are make-believe being made by this make-believe car* (i.e., the block). With this complicated flag, Sally and Max may succeed in representing the block/car as making the “vrrrm” sounds. But this still does not explain why Max makes the sounds. In the flagging account, Max and Sally do not represent *Max pretends P*, and so they cannot view him as pretending the sounds are made by the block/car. Second, it is difficult to envisage *why* Sally or Max would ever represent the “vrrrm” sounds with this complicated flag. How would they ever hit upon the idea of flagging Max’s sounds in this way? The flagging theory’s difficulty with pretend sounds extends to pretend speech. But as noted, children succeed in following pretend speech at age two, and correctly modify their response to requests depending on whether the experimenter produces them normally or with the pretense that they are made by a teddy bear (Friedman et al., 2010). It is very difficult to see how children could succeed (and without showing any signs of being puzzled) if they were limited to flagging the requests, the bear, or both.

In quick sum, both the flagging and behavioral accounts seem to have difficulty explaining basic features of pretend play. But of course, this does not imply that the mentalist account is correct. The next section revisits the mentalist account, and challenges an essential claim of the account. Also, a new alternative to the mentalist account (perhaps better described as a modification to it) is described. This account claims that children do represent pretend play via the concept *pretend*, but endorses a different view of what kind of concept it is.

### **Pretend Play as Communication**

The mentalist view claims that *pretend* is a mental state. From this it follows that recognizing that someone is pretending requires attributing a mental state (i.e., *pretend*), and is therefore a form of theory of mind. But how do we know whether *pretend* is a mental state? As noted, we might expect *pretend* is a mental state because it relates an agent (e.g., Max) to a propositional content (e.g., the cup contains juice), as do propositional attitude mental states like *believe* and *intend*. However, this does not show that *pretend* must be a mental state because *say*, *sing*, and *write* also relate agents and propositional contents even though they are not mental states. For example, Max can *say* that the cup contains juice, even though *say* is not a mental state. Hence, *pretend* might not be a mental state.<sup>10</sup>

Moreover, there is a compelling reason to believe that *pretend* is not a mental state. Considered individually, mental states like *believe*, *desire*, and *intend* do not require behavior. But pretend play does require behavior. Max can believe a cup contains juice even if he does not drink the juice, and he can want or intend to drink the juice even if he never gets around to doing so. But it would be odd to assert that Max pretends the cup contains juice if he is quietly reading a book with no cup or juice in sight. At best he could be described as imagining that juice is in the cup, or as thinking about this.<sup>11</sup> For actual pretense, Max has to behave in a way that conveys what he pretends. This requirement for behavior marks an important difference between pretending and mental states like imagining, believing, desiring, and even intending. If pretending requires behavior, it is difficult to view it as just a mental state. But it is hard to be certain—perhaps *pretend* is a distinct mental state that can only be held (or at least attributed) if accompanied by behavior.

The preceding considerations do not conclusively show that pretend is not a mental state. Nonetheless, I believe it is possible to develop a plausible alternative account built on the premise that *pretend* is not a mental state. The basic claim of this alternative account is that rather than being a mental state, *pretend* is better understood as a form of communication or expression, similar in important ways to activities like drawing, painting and writing. At the outset, it must be acknowledged that this account is extremely influenced by the claim that pretend play is a form of ostensive communication (Leslie & Happé, 1989) and so rather than being viewed as a new account of pretend play, what follows might better be viewed as a description of what follows if the existing claim that pretense is ostensive communication is accepted, while the claim that pretend is a mental state is denied.

To develop this account, consider drawing. When people draw, they use lines (and may other kinds of markings) to represent things. The lines in a drawing can represent a horse, a tea party, a woman talking on the phone, and so on. Drawing is communicative because the “artist” forms the lines such that other people are typically able to infer that the drawing represents something (i.e., rather than being nothing more than a collection of lines and other markings), and to infer what it represented in the drawing; viewers of a drawing of a horse will typically infer it is a drawing (i.e., a kind of representation) and that it represents a horse. In recognizing that someone is drawing a picture of a horse, people can represent that the artist is representing a

horse even though *draw* is not a mental state. Attribution of mental states may be necessary to interpret drawings because lines (and other markings) can only represent something because this was intended by the artist. But to the extent that people consider the attitude the artist takes to the lines in a drawing, it is mostly by considering what the artist *intends*. For example, people might conclude that a certain line is a drawing of a horse if they judge that the artist *intended* that it represent a horse; even two-year-olds appear to reflect on artists' intentions in this way when interpreting drawings (Preissler & Bloom, 2008; also see Gelman & Bloom, 2000). But the main point is that appreciating drawing does not require attributing mental states specific to drawing.

Pretend play is very similar to drawing. In a drawing, lines (and other visual markings) can represent many things, and the same is true for the objects and actions in pretend play. Drawing a horse and pretending that a stick is a horse are two different ways of representing a horse, and both are produced in ways that convey that they are representations and what it is they represent. Therefore, just as people can recognize drawings without attributing a dedicated mental state *draw*, it is plausible that they can also recognize pretend play without *pretend* being a mental state. As with drawing, the recognition of pretend play only requires people to recognize that certain actions and objects are intended to serve as representations, and to infer what it is the pretender intends they represent. For example, when Max lifts the empty cup close to his mouth and makes a slurping sound, people judge that he is pretending because the manner in which he behaves suggests that he intends to represent something, and specifically he intends his actions to represent (or convey) that juice is in the cup, and that he is drinking it.

Against this analogy with drawing, it might be pointed out that people talk about pretending and drawing very differently. We say "he pretends this stick is a horse," but not "he draws this line is a horse." This might seem to suggest that the way we represent drawings and pretend play are fundamentally different. But this seems wrong. People could not appreciate that a drawing is a drawing (and not a real object, nor just a collection of haphazard lines) if they did not appreciate that the drawing consists of lines that represent (or are intended to represent) objects. It is also worth pointing out that drawing and pretend have other parallels. A crucial claim of the mentalist account, and one handled poorly by competing accounts, is that people can pretend that P even when P is true (Leslie, 1994). For example, in pretend play it is possible for a daughter to pretend to be a daughter (e.g., "Let's pretend that you're a mommy and I'm your kid!") A parallel occurrence arises in drawing when part of a drawing depicts a drawing. In a drawing of an artist drawing a line, that line represents a line.

The claim that children view pretend play as communication (or representational activity) is very similar to the mentalist account. Like the mentalist account, this account claims that children interpret pretend play by processing representations like *Max pretends the cup contains juice*. And as in the mentalist account, processing such representations is meta-representational because Max is represented as pretending, and pretending is representational (i.e. though as communicative behavior, not because it is a propositional attitude mental state). The key difference from the mentalist account is that *pretend* is claimed to not be a mental state. This move strongly weakens the parallels between pretending and believing; instead pretend is viewed as more akin to representational activities like drawing, painting, and writing. But even so, the account still implies that recognizing pretend play requires theory of mind to the extent that observers must infer what the pretender intends to represent. Hence, from the perspective of this view of pretend play, the chief deficit of the behavioral and flagging accounts is not that they give children too little credit for reasoning about mental states in pretend play, but rather that they overlook the communicative (and representational) nature of pretend play.

Viewed chiefly as a communicative and representational activity, new questions about pretend play arise. Why are children endowed from early in development with the ability to transform the objects around them into representations? It could be that pretend play is just for fun. Alternatively, if pretend play is fundamentally communicative this might be to some end; the communicative nature of pretend play might allow children to acquire knowledge from others (Sutherland & Friedman, 2012, in press).

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## Notes

<sup>1</sup>This might sound awkward in the case of *want* and *intend*, because in English this would more likely be expressed, as Max wants (or intends) the cup in the fridge to contain juice.

<sup>2</sup>By contrast, theory of mind does not concern the possession of mental states. Hence, whether young children (or dogs, or robots) have beliefs (or hopes, or imaginings) is not a question about theory of mind. But whether young children (or dogs, or robots) can attribute beliefs (or hopes, or imaginings) is.

<sup>3</sup>More formally, the mentalist account claims that Sally will represent: Max pretends (of) this cup (that) “it contains juice.”

<sup>4</sup>This reasoning makes the case for why the young child’s ability to represent others as pretending is a type of theory of mind reasoning. What about when children engage in pretend play by themselves? When Sally pretends that there is juice in an empty cup, and pretends to drink it, she presumably represents herself as pretending. For instance, she might represent *I pretend this empty cup contains juice*. As such she attributes a mental state, pretending, to herself, and represents herself as representing. Nonetheless, this chapter focuses on how children recognize and represent others’ pretense.

<sup>5</sup>If Max was trying to deceive Sally, then he might want her to draw such false conclusions. However, in pretend play the aim is not deceptive, the aim is to make the pretense obvious.

<sup>6</sup>Similar points apply to the finding that children less than six years old often categorize instances of pretending with physical rather than mental processes, and often deny that pretending requires the mind and brain (Lillard, 1996). The mentalist account claims that *pretend* is a mental state, and that children use their concept of this mental state to represent people’s pretense. The account does not claim that children understand that *pretend* is a mental state.

<sup>7</sup>Alternative formulations of the behavioral theory sometimes claim that children view pretense as behaving-as-if P. However, it is difficult to know what this phrase means, if it is not equivalent to Stich and Nichols’ behavioral description. Also, it is also easy to absent-mindedly think of “behave-as-if” as synonymous with “pretend.” Of course, if there were no difference between these terms then there would be no difference between the behavioral and mentalist accounts of pretend play, and moreover the behavioral theory might no longer be particularly behavioral because it would covertly make reference to the propositional attitude *pretend*.

<sup>8</sup>Things already become strained for the behavioral account if similar examples of such pretense are considered. For instance, if Max runs around with his arms outstretched, it would not be difficult to recognize that he pretends that he is an airplane (and that his arms are wings). But is he really behaving in a way that would be appropriate if he were an airplane? If he were an airplane, would it be appropriate for him to stick his arms out?

<sup>9</sup>The terms *pretend* and *make-believe* are synonymous (or close to it), and so it might be noted that the flagging account does credit children with the concept *pretend*. However, in the flagging



account *pretend* is not a propositional attitude, and is never used to form representations such as *Max pretends the cup contains juice*. Instead children use this concept to represent objects as having certain counterfactual properties and identities. To avoid confusion with the propositional attitude concept *pretend*, and in keeping with Harris and Kavanaugh's (1993) own description of their theory, the current description sticks with *make-believe* in describing the flagging account.

<sup>10</sup>This is not to deny that mental states are not required to actually engage in pretend play. Obviously, pretend play depends on mental states, as do countless other human activities that are not themselves mental states. The point for now is that only that *pretend* itself might not be a mental state.

<sup>11</sup>The claim that pretending requires behavior is not contradicted by the observation that Max might remain very still while enacting certain kinds of pretense. Max might remain still if he pretends to sleep, but this stillness serves to convey what he pretends. We could not say that Max pretends to sleep, though, if he were running about the room with his eyes wide open.