

Basic Pretending as Sensorimotor Engagement?

Lessons from Sensorimotor Theory for the Debate on Pretence

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Abstract. This paper explores whether the sensorimotor theory of perception (SMTP) might contribute to a de-intellectualized understanding of pretence. It applies SMTP to Currie's [3], [4] notion of perceptual *seeing-in* that underlies the capacity to make imaginative transformations (*seeing-as*). This account bypasses manipulation of representational contents *off-line*, and argues that the relevant work might be done by *on-line, sensory imaginings* stemming directly from perception. This novel position is supported with augmented theory of affordances and an account of directly perceived meaning. Ultimately, the paper proposes a less intellectualist approach than Currie's to object-substitution pretend play of young children, setting the stage for an enactive theory of basic pretence.

Keywords: Pretence, Pretending, Sensorimotor, Enactivism, Affordances, Imagination.

1 Introduction

From at least 18 months of age, when their use of language is still primitive, children engage in spontaneous pretence, as fun (with no ulterior motive, like an intention to deceive): they pretend that a banana is a telephone and that they are talking to it, that there is a dragon under the bed when there is nothing, that a doll's face is dirty when it is clean [11]. This behavior seems likely to be the primitive precursor to highly sophisticated fictions that the word 'fiction' naturally evokes: literary fictions are most salient, followed by plays and movies, arguably followed by painting and sculpture [20, 1].

This paper will take the case of banana-phone object-substitution play of pre-verbal children as genuine example of pretence and a paradigm case of basic pretend activity that can extend to more complex types of play. Pretend play, traditionally defined as *symbolic play*, has been taken by mainstream theories to require representational capacities of some kind.¹ At one end of the spectrum is the most

¹ Some even consider full-blown linguistic capacities to be necessary [9]. In this paper I will assume that the linguistic and conceptual capacities of 18 month olds are too limited for manipulation of propositions like 'this banana is now a phone', while at the same time that 18 month olds do engage in genuine pretence, thereby excluding for the sake of argument the possibility of a linguistic account of pretence.

hyper-intellectualist, metarepresentational theory of pretence [11], which requires the skill to think of the banana as a phone in order to engage in the banana-phone pretence. At the other end, there are less-intellectualist accounts that appeal to imaginative or simulative activity that minimally only require pretenders to *see* one thing *as* another, or *act-as-if* one thing was another [3], [4], [8], [13], [17]. The paper will focus on one of the least intellectualist accounts of pretence proposed to date: Currie's [3] simulationist account of pretence.

Currie's ambition in advancing his account of pretence is clear: "The more we can account for what we do without supposing we need to think about doing it, the better" [3, 191]. Towards that end he regards pretence as involving imaginative transformations that, while not meta-representational, require *decentring*, or the "capacity to view the world from another perspective" [3, 211]. *Decentring* entails *off-line* simulation of possible scenarios, as will be discussed below.

However, even less intellectualist account of object-substitution pretend play is possible by applying O'Regan and Noë's [18] sensorimotor theory of perception (henceforth: SMTP), which will be argued for in the following way. Section 2 of the paper describes Currie's position on pretending in terms of *seeing-as*, followed by how the notion of seeing-as has been utilized by SMTP. How SMTP might contribute to pretending is clarified in Section 3. The suggestion here is that SMTP aids in understanding basic pretence by applying to one crucial aspect of Currie's notion of pretence – the perceptual *seeing-in* (or *experiencing-in*) – but reinterpreting it along more enactive lines (in terms of *seeing-affordances-in*). It will be shown that this is an important corrective to Currie, but it is not enough. For Currie holds that seeing-in is at most necessary but not sufficient for pretence, insisting that representational *seeing-as* understood as the capacity to make imaginative transformations is required even for the simplest acts of pretence. Section 4 discusses why *decentring* is deemed by Currie to be necessary to play the role of such transformations. Section 5 suggests possible ways to rebut against such arguments, indicating how it might be possible to account for the sorts of imaginative transformations that Currie thinks *seeing-as* requires, while bypassing the need for *off-line decentring* at its core. Section 6 proposes a positive account, where, in the place of *decentring*, it is argued that the relevant work might be done by *sensory imaginings* (understood as *on-line* perceptual activities), which are augmented by sensorimotor skills, certain understanding of Gibson's theory of affordances [7] and Merleau-Ponty's [14] account of directly perceived meaning, and further developed through narrative practices. This novel position aims to provide a first step toward a theory of basic pretence based on action rather than representation.

2 *Seeing-as* in Pretence and SMTP

What is required for *seeing* the banana *as* a phone? Currie explains that "in pretence, a creature may respond to the environment, but as it is transformed by imagination" [4, 275]. To *see-as*, "the pretending creature represents the world, not as it is, but as it might be" [4, 276], or *decentres*. In earlier work, Currie [3, 211] re-describes *decentring* in terms of a representational shift of perspectives:

Decentring is the capacity to view the world from another perspective: to view the world as it was for me yesterday, as it is for you now, as it might be for me tomorrow, as it is according to some story. Decentring indicates the (relative) freedom from environmental constraint and sensitivity to representational content we think of as part of rationality.

Minimally, such imaginative transformations are needed to account for having controlled experiences in the absence of appropriate stimuli. As Harris and Kavanaugh claim, “pretence is similar to false belief in that actions stemming from both mental states are directed at situations that do not actually obtain” [8]. Thus, decentring is said to be necessary to allow the basic ‘as-if’ response to the environment, which does not produce direct stimuli.

One way of developing the notion of decentring might be to appeal to Recreative Imagination [5].² According to Currie and Ravenscroft, Recreative Imagination is simulation of perception, which, in turn, involves representing and manipulating perceptual contents *off-line*, or to “substitute one thought *content* for another” [5, 140]. It grants us the “ability to experience or think about the world from a perspective different than the one that experience presents” [5, 9]. If we understand Recreative Imagination as an empirical hypothesis about a mechanism involving simulation of perception, it might explain how decentring is done.

Pretence, to Currie, seems to be a higher cognitive activity after all. For example, Currie says that “there is a sense in which pretence *is* a ‘higher’ mental process ... The child who pretends that Pig is dirty needs to have the first-order thought ‘the Pig is dirty’; ... this thought is tokened as part of an act of decentring” [3, 219]. Currie also claims that *seeing-as* involves “acting under a suppositional mode”, where one can “consider an idea draw consequences from it, consider the evidence for it, and compare it with other ideas” [3, 233], or that pretence stands in a relationship to the act of pretending (understood as a mental state of imagining) like truth stands to believing [3, 205]. Thus, while Currie’s account of pretence is to date the least intellectualist one, it is not clear that it goes as far as it ought to.³

In SMTP, in turn, we find an enactive understanding of *seeing-as*. The big idea behind SMTP is the stress it lays on the role of embodied activity over thought. O’Regan and Noë are the promoters of a view of perception that is intimately linked with action; they follow the motto that *perceiving is something we do* [18]. For example, Noë claims that seeing a cube as a cube is a form of embodied activity:

² To apply it to the banana-phone case, Currie and Ravenscroft [5, 33] claim: “(A) child holding a banana to her ear and speaking into it is pretending to make a telephone call when the behavior is accompanied, or perhaps driven by, the imagining that this thing, actually a banana, is a telephone.”

³ Decentring is presented as necessary to be *thinking* about the world [4, 277]. In the end, it does not seem for Leslie and Currie to be far off from each other, as the research question of Leslie’s “What allows children to think of a banana as a phone?” [11] and Currie’s “What allows children to act as if the banana was a phone?” [3] could amount to the same thing.

When you experience something as cubical, you experience it as presenting a definite sensorimotor profile. That is, you experience it as something whose appearance would vary in precise ways as you move in relation to it, or as it moves in relation to you [16, 117].

Although Noë thinks you cannot perceive without content (according to him, perception is both content and concept involving), he has an unusual story about perception that makes it an activity [16]. Thus, seeing the cube as a cube would, arguably, invoke an exercise of a basic sensorimotor skill that treats mere *seeing* as kind of *doing*.

Still, we do not have an account of how to apply SMTP to pretence. Can it be extended to illuminate our understanding of pretence? My suggestion is that if there is a natural connection between perception and imagination [5], then there is a potential contribution SMTP could make to the topic of pretence. Yet, even if we grant the validity of SMTP as applied to perception, it seems to, at best, only target the capacity to see X as X (e.g., a cube as a cube), but not X as Y (e.g., a banana as a phone). If pretence is supposed to be directed at that which is not perceptually present, how is SMTP relevant for pretence? I suggest that Currie's notion of perceptual capacity to *see-in* may fulfill this demand. The next section will first elaborate on Currie's notion of *seeing-in* that underlies the capacity to *see-as*. In agreement with Currie, I will claim that *seeing-in* may be a crucial capacity for engaging in basic pretence. But while Currie's notion is passive, this section will suggest that SMTP allows for a new understanding of *seeing-in* as an activity. Understanding *seeing-in* as playing an active role in *seeing-as* is crucial for further analysis of *seeing-as*.

3 *Seeing-in and Seeing-affordances-in*

To Currie [3], *seeing-in* (or *experiencing-in*) is a perceptual basis for *seeing-as*. It is important to pretence as it plays various enabling roles in pretence.⁴ *Seeing-in* may be a precursor to *seeing-as*.⁵ It is a phenomenon that occurs when one, for example, sees a woman in a picture or a face in the clouds. Currie claims,

Such *seeing-in* does not involve seeing a woman, nor does it involve the perceptual illusion of seeing one; neither is it a case merely of judging that the picture represents a woman: it is genuinely perceptual phenomenon [3, 220].

Currie contends that this ability extends from seeing things in static objects to seeing things in human behaviours:

⁴ “Seeing-in may constitute part of primitive basis of pretence, it enables pretence to be enacted and communicated without the necessity for full-blown conceptual capacities” [3, 222].

⁵ Otherwise, presumably, one could transform anything into anything else. *Seeing-in* may, thus, be a kind of weak constraint that structures what is being imaginatively transformed.

The next step (...) is to suggest that, just as we can see things in pictures, we can see things in simple mimetic acts. When someone moves in a certain way we can see in their movements such acts as driving a car, hitting a cricket ball, or nursing a baby (...). The movements might be exaggerated or stylized, but we can still see the action in the performance, just as we see a well-known face in its caricature [3, 221-222].

Given there is no woman or actual cricket game present to see, and there is no confusion (or illusion) as to what is occurring, it is a fair question to ask whether seeing-in is a genuine perceptual phenomenon after all. Bracketing that concern, and allowing for the sake of argument that it could be a perceptual phenomenon, the question I want to focus on is: could seeing-in be applied to pretend play cases without involving making judgements or inferencing? Invoking affordances could provide the basis for a more de-intellectualized account.

Crucial to the account proposed in this paper is the idea that seeing-in could be understood as *seeing-affordances-in*.⁶ Drawing on Noë's account of Gibsonian affordances [16], I will propose that *seeing-affordances-in* is an activity (as opposed to passive thought process), in line with SMTP, that allows bypassing the need for off-line *decentring*.

Noë describes affordances in the following manner:

Things in the environment, and properties of the environment, offer or afford the animal opportunities to do things (find shelter, climb up, hide under, etc.). (...) When you see a tree, you not only directly perceive a tree, but you directly perceive something up which you can climb. Gibson took this feature of his theory to be quite radical, for it suggested that we directly perceive meaning and value in the world; we do not impose meaning and value on the world [16, 105].

Noë's environmental affordances are best understood as possibilities for actions. The role of affordances is especially promising because it allows the possibility to see in activities, not just entities: we could be seeing in the 'banana-at-the-ear play' an affordance to play 'calling'. But for SMTP to secure the claim that banana affords 'telephone' play, what may be additionally needed is an account of social affordances in play, as will be proposed in further sections. The claim will be that what the banana affords will become fully meaningful when children get immersed in the intersubjective environment and interactions.

⁶ Currie also speaks of seeing-affordances-in when referring to Millikan: "Millikan emphasizes the role of looking for and seeing affordances in the environment. (...) it seems to me that this may be a kind of seeing-in" [3, 220]. However, for Currie, the capacity to *see-affordances-in* plays a different role (the role of recognizing the pretence in others) than the one required for the sensorimotor account of pretence (enabling treating one object as another, or *seeing-as*). Thereby, it will be treated as a different concept.

4 Potential Worries

There are valid worries that may be raised by the standard representationalist approaches to pretence, which I will introduce in the present section. An account of seeing-in may not seem sufficient to explain pretence; after all, Currie himself insists that *seeing-as* understood as the capacity to make imaginative transformations is required even for the simplest acts of pretence. What follows are some reasons for thinking why we might need decentring.

Firstly, as mentioned earlier, such representational faculties are allegedly needed for one to “be directed at situations that do not actually obtain” [8] or to “stand back, cognitively speaking, from the immediate environment” [4, 275], for fulfillment of which Currie endorses making off-line simulations. With *seeing-affordances-in*, we also need to explain the possibility of seeing an action (calling) in the object (the banana). The problem is that there is no affordance to ring someone on the banana or dial a number, so how can objects afford special ‘phone’ actions, such as, e.g., calling or dialing? The worry here is that the question may have shifted from ‘how is it possible to see objects (that are not there)’ to ‘how it is possible to see affordances (possibilities for actions), which are not there’.

Secondly, Currie claims that *seeing-in* constrains possibilities of actions, while in pretence, we have many possibilities of play. Seeing-in may not be enough because it has further constraints, such as being “fast, mandatory, encapsulated, very little dependent on learning... Try *not* seeing a person in the picture next time you look at a painted portrait,” says Currie [3, 220-221].⁷ The suggestion is that *seeing-in* perhaps would leave us with a very little room for voluntariness and creative choice in how or what we pretend.

Finally, an objection to an account of pretence involving *direct* perception is that it is supposed to be the *meaning* (not the environment) that guides pretence. According to Currie, “Vygotsky recognized (that) pretence is a form of decentring: the pretending creature is guided ‘not only by immediate perception ... but by ... meaning’” [3, 211]. Meanings, traditionally, are understood as ideas or thoughts imposed on reality. The intellectualist assumption is that without representing the meaning of what is to be acted out, one could not get engaged in pretence in the first place. Thus, the direction of fit is supposed to be meaning to environment (adding new meaning ‘phone’ to the banana to pretend play ‘banana-phone’), and not environment to meaning, which is what the *seeing-affordances-in* would propose.

⁷ Similarly, it may be claimed that affordances are limiting. As Vygotsky claims, “(Things) dictate to the child what he must do: a door demands to be opened and closed, a staircase to be run up, a bell to be rung. In short, things have an inherent motivating force. (...) In play, things lose their motivating force. The child sees one thing but acts differently in relation to what he sees. Thus, a situation is reached in which the child begins to act independently of what he sees” [22, 11].

5 Rebuttal

This section will start with answering the three objections and will be followed by a suggestion of an account of pretence as inspired by SMTPs.

5.1 Affordances Are Present, Not Absent

The first objection is that one requires representations to refer to something that is absent. My rebuttal does not deal with the assumption that when objects are absent, representations are needed.⁸ Rather, it deals with the assumption that in pretend play, we encounter absence, and we *must* stand back from the immediate environment. It is not clear whether all pretend play deals with such absence from the immediate environment. It is questionable whether in the situation when the child acts upon a prop (like in the banana-phone game), he or she ever acts independently of what is seen. That is because the banana, as an object, is part of the immediately present world, which affords acting upon. We may also think of affordances not only as properties of objects [16] but also a relational quality [1]. So while ‘phoneness’ property or ‘buttons’ property is absent in a banana, the shape of the banana is present for ‘calling’ to a human child when the banana is placed to an ear. Properties of objects as endorsed by Noë [16] as well as the history of past interactions as endorsed by Chemero [1] of the child shape how the banana is interacted with, which make ‘calling’ (or a way in which the object in question can be held, placed or turned around), in some sense, present. Thus, it is likely that in acting upon a prop (like in the banana-phone game), the player does not act independently of what is seen, but is guided by the prop and perceives in action what the prop affords. Acting upon affordances, which allows manipulating the possibilities of what objects or situations afford, answers the question of how it is possible to see something other than what is perceptually present.

5.2 Affordances Structure, Not Constrain

With seeing-affordances-in, we are not limited to see one way of interacting with an object. A banana may afford various actions in the context of play, such as playing ‘phone’ when held to an ear, playing ‘hat’ when held on the head or playing ‘gun’ when pointing it at someone. Yet, importantly, it is not the case that ‘everything goes’; objects can also resist other kinds of play (e.g., playing ‘human shoe’ with a banana would be tough as the banana would get squashed). Thus, object affordances give novel possibilities of play, structuring play but not limiting possibilities. That objects can be played in more than one way is a view supported in recent

⁸ Noë himself suggests that we need representations when the world is not immediately present. “Surely we sometimes need to think about the world in the world’s absence (when it’s dark, say, or when we’re blind, or not at the location we’re interested in), and for such purposes we must (in some sense) represent the world in thought” [16, 22].

psychological findings [15]. Objects are defined by their social and communicative uses, not their 'inherent meanings'.

Importantly, it is not the case that anything affords anything; that would not be very telling. For example, the banana does not afford as many things to a pro improviser, as opposed to a novice, as opposed to non-human animals without thumbs that could not lift it. An actor engaging in improvisations with objects has training, and such history of past interactions also shape the number of possibilities the object affords to one. Thus, looking at the individual capacities and history of engagements, not only perceiving entities, is important for this account [19]. For a person involved in social practices, something more can be afforded. This idea will be elaborated on in the next section.

5.3 Emergent Meaning and the Direction of Fit

With regard to the question of meaning, Vygotsky may have been right in noticing that some forms of pretence are framed by meaning, but his notion of meaning is not to be equated with decentring of the sort that Currie endorses. 'Meaning' in this context might include a wider grasp of active possibilities; it may be a different sense of seeing connections and possibilities for action. Vygotsky did not specify that meaning had to be representational or contentful, but notes that in pretend games young children are reliant on perceptually available information:

Experiments and day-to-day observation clearly show that *it is impossible for very young children to separate the field of meaning from the visual field* because there is such intimate fusion between meaning and what is seen [22, 97].

Thus, there is a way to accommodate Vygotsky (but not Currie) in the claim that imaginative transformations are important for pretence, when Vygotsky's notion of meaning is not understood in terms of decentring but by applying an alternative conception of 'meaning'. One such alternative conception can be found in phenomenology, where the notion of meaning does not refer to mental contents, but to directly perceivable possibilities. According to Merleau-Ponty, perception is already meaningful; it "arouses the expectation of more than it contains, and ... is therefore already charged with meaning" [14, 4]. The claim is that perception should not be opposed to imagination, even if they are in some way different, and that perception is already meaningful as it allows for novel possibilities to be perceived in the present object. Seeing a possibility is then anticipating something as happening. This is applicable to the pretend play in question, which can be explained not in terms of imposing new meanings in the form of rules for using the items on objects (such as imposing 'telephone' on a banana).⁹ Instead, it can be accounted for with directly

⁹ Even Vygotsky spoke of the lack of necessity of rules being established in advance of play: "The imaginary situation of any form of play already contains rules of behaviour, although it may not be a game with formulated rules laid down in advance" [22, 94].

seeing the meanings in terms of possibilities for action, or affordances (possibility of holding and using the banana as a phone).

There is a question to be asked about the direction of fit. With the notion of perceived affordances, the direction of fit seems to be from the environment (the object and what it affords) to meaning. This may be the problem with the notion of *seeing* affordances in objects, as the assumption would be that only those objects guide us in play. This can't be the full story. Some argue that object's uses are also not directly visible; their meaning lies in the public use [2]. The key move may be to stop thinking that objects have perceivable properties, and that what we may need are further capacities in order to pretend. The direction of fit from meaning to object can be preserved, with an adjustment. It is not the individual, representational capacity of decentering that affects the object, but in large part acting within intersubjective engagements that shape pretend play. That is, we needn't assume that in retreating to the meaning-environment direction of fit, we need to be decentering, but that something else (as meaning from intersubjective engagements) can play that role. The final section will gesture at how the intersubjective engagements shape pretend play.

6 The Positive Account and Its Benefits: Special Affordances Revisited

The positive account on offer here is that imaginative play is based on a strong link between perception and action, as proposed by O'Regan and Noë's SMTP [18]. SMTP highlights the role of sensorimotor engagements in creating the various possibilities for action, and constructing new meanings in intersubjective space. The seeing of possibilities for action may be extended by the application of know-how (or sensorimotor contingencies), as in the example of the 'pretend drying' of a toy elephant that got 'pretend wet' [12]. The 'drying' is a classic case of an outward behaviour that seemingly can only be explained by the theory that one carries out actual inferences 'behind the scenes' (such as: "if the pretend-water is being poured on the elephant then the elephant will be pretend-wet"). An alternative view of this situation is that one sees connections between the pouring movement in the case of the toy-elephant and, e.g., water being poured from the teapot, water poured on the child during a bath, or what showers are from stories and cartoons. The 'drying of wet things' behaviour may stem from applying what has been experienced in everyday 'taking-a-bath' contexts or narratives, to the 'wet-elephant' immediate play context. That is an example of applying know-how from perceptual activities stemming from the actor's history of past engagements to pretence.

That meanings can be constructed in intersubjective space is also suggested in De Jaegher and Di Paolo's [6] description of pretence in charades, where, even if the pretender started with an initial premise and understood the meaning of what's to be pretended, the way of acting out that the word on the card changes due to the breakdowns of social communication. In such cases, a 'shared meaning' of what is played emerges when the pretenders adjust their performance to the audience's needs, and audience's responses guide further changes in 'depicting' the meaning of the

word on the card. De Jaegher and Di Paolo call this ‘participatory sense-making’ [6]. They suggest that novel meanings are established from mutual understanding, not from manifesting the initial premise.¹⁰ The players’ gestures change and evolve through patterns of coordination and breakdowns in the social setting.¹¹

Social affordances might also take up some of the work in pretence that individual representations were thought to do [2]. The pretence may get started by imitating another person without knowing what the goal of the game is or following a clear script, which shows that an ‘initial premise’ with specific contents and rules of the game represented is not necessary. Imitating may be one way that children are brought into games – socially – without having to have all of the individual resources within themselves to frame the activity [19].

The connection between intersubjectivity and affordances is tight, which is apparent in Gibson’s claim that affordances are neither in the environment, nor in the agent, but in the interactions, set up through a history of interactions (which leaves a possibility of their shifting) [7]. As Chemero in [1, 145] says,

A better way to understand abilities [than to understand them as dispositions – *added comment*] is as functions. Functions depend on an individual animal’s developmental history or the evolutionary history of the species, both of which occur in the context of the environment. Given this, it is actually more appropriate to understand abilities, like affordances, as being inherent not in animals, but in animal-environment systems. That is, like affordances, abilities are relations.

Thus, it is not the case that in the *object* one finds ‘stable’ affordances (e.g., “phoneness” of the banana shape); nor is it the case that it is something in the *individual* that allows these pretend actions (e.g., the representation of “phone” with a set meaning stored in the head and imposed on the banana), but a dynamic relationship between the agent and the object, which changes with movement, and novel interactions with other people and the objects, affording thereby novel ways of acting. How we develop the interactions with relevant affordances is to be discussed in future research.

¹⁰ De Jaegher and Di Paolo [6] claim that the content of the intention determines the game, but that due to participatory sense making, shared meanings are developed so it is the sensitivity to others’ understanding of what the pretender is projecting that is guiding his/her behavior. If that is right, then my prediction is that if hopping around does not do the job of conveying ‘rabbit’, the child will try other activities, stemming from learned stereotypical ways of playing.

¹¹ Hutto and Myin [10, 173] also claim that meanings can emerge from social interactions and are created in shared practices: “(The) very possibility of conceptual meaning, error and assessment requires an inter-subjective space. (...) Acquisition of such conceptual abilities depends on being able to have and share basic experiences with others.” While they are talking about concepts in particular, it is plausible that their views can extend to pretend play affordances.

7 Conclusion

In this paper I have proposed an account of pretence as involving active seeing-in. I have argued that sensory imaginings augmented by sensorimotor skills suffice for playing the role of imaginative transformations required for *seeing-as* to explain the basic type of pretend play, like the banana-phone play. Without the need to represent what they're doing, children engage in pretend play by enacting typical routines stemming from perception. An analysis of what is required for imaginative transformations in *seeing-as* ceases to be an *off-line* mental activity and is instead understood as an *on-line* perceptual activity. The re-description of the notion of meaning from entertaining a set of rules to seeing possibilities of action allows to treat meanings as directly perceptible, and applicable at least in pretend games with props such as object-substitution play. *Seeing-affordances-in* plays a central role for pretence as it is an account of how objects and situations may be engaged with, using a basic capacity such as a sensorimotor mechanism. This novel approach to pretence suggests that pretence can be conceived as a way of acting that relies solely on embodied, perceptual and intersubjective skills, which is in line with O'Regan and Noë's view of perception: just as they claim that perceiving is a way of acting, so I claim that basic pretending is.

There are several advantages of this novel account of pretence as inspired by SMTP, particularly by its focus on activity and the role of affordances in perception. First, it is a candidate for the least demanding (and anti-intellectualist) view of pretence as per arguments from ecological validity, Ockham's razor or Morgan's canon. Yet, this attempt at a sensorimotor account of pretence may not extend to all forms of pretence for fictional activity. Undeniably there are more complex ways of pretending possible and they may invoke representing or making inferences, especially once full-blown language capacities are at play.¹² However, to explain pretence of 18-month-old children, an account of perception and action suffices. In line with known empirical studies, children at the age of 18 months engage in pretend games are reliant on perceptually available information [8], [13]. Moreover, mere seeing-in is not enough; action is necessary. The acts of pretend play are the parade cases of pretence. As Vygotsky observes, "child's play is imagination in action ... we can say that imagination in adolescents and school children is play without action" [22, 93]. Presumably, just seeing one thing as another without acting comes later [20]. Thus, when dealing with the banana, the features of the object in line with what children see done with phones (their history of engagements) and their enacting of observed affordances best explains why playing with it as a phone is a natural thing to do. Hence, it is likely that the banana-phone object substitution play can reduce to utilization of solely such sensorimotor abilities, at the same time being a paradigm

¹² Just perceiving and acting may not be enough for a full-blown account of pretence; there are other aspects of pretence crucial for its success, such as imitating, responding to emotions, gesturing, smiling, giggling, context-sensitivity, and linguistic skills, to name but a few. Perceiving and acting are mentioned solely to suggest what minimally plays the role of imaginative transformations that underlie the banana-phone pretence.

case of basic pretence that more complex accounts of pretence can build on. As the burden was on the embodied and intersubjective theories to show whether any form of genuine pretence is possible without representing [21, 130], this account has shown that there is a possible space for non-representational pretence that applies to basic pretence, laying groundwork for its application to further types of pretence for future research.

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