

Pretend play: More imitative than imaginative

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Pretense is generally thought to constitutively involve imagination. We argue that this is a mistake. Although pretense *often* involves imagination, it need not; nor is it a kind of imagination. The core nature of pretense is closer to *imitation* than it is to *imagination*, and likely shares some of its motivation with the former. Three main strands of argument are presented. One is from the best explanation of cross-cultural data. Another is from task-analysis of instances of pretend play. And the third concerns the different ways in which pretense (especially childhood pretense) and imagination impact one's evaluative/affective systems.

KEYWORDS

affect, cultural learning, imagination, imitation, play, pretense

1 | INTRODUCTION

On the face of it, imagination and pretense share a good deal in common. Both seem to require that we represent counterfactual scenarios while remaining cognizant of how the world actually is; both are universal human capacities that emerge spontaneously in childhood; and, of course, both can be fun. A good deal of philosophical and theoretical work has focused on these alleged commonalities. Nichols and Stich (2003), for example, characterize pretense as action of the sort one would perform if a counterfactually represented (supposed) scenario were true. Picciuto and Carruthers (2016) argue that to pretend something is to act as if that thing were so while imagining that it is. In their extensive evaluation of the proposed functions of pretense, Lillard et al. (2013) emphasize imagination by offering the following definition: “[A] pretender knowingly and intentionally projects some mentally represented alternative on to the present situation in the spirit of play” (p. 2).

Imagination is a broad church, and many distinct phenomena can be described as “imagining” (Liao & Gendler, 2020). There is no agreed framework for carving up the domain, nor on the precise extent of the domain. Some of this variety is reflected in existing accounts of pretense. Nichols and Stich (2003) think that pretense involves a kind of suppositional imagining.

They postulate a “possible worlds box” into which a proposition can be placed (e.g., *the banana is a telephone*), which then combines with the child’s other beliefs and the child’s desire to act as if that supposition were true to issue in pretend behavior. On the other hand, Lillard (2001), Carruthers (2006), and Lillard et al. (2013) all think that pretense involves imagery rich forms of imagining. On these accounts, to pretend that a banana is a telephone is to “overlay” an image of a telephone onto one’s perception of the banana. Thus, one might visually project where the phone’s buttons and screen would be (to interact with them accordingly), while also imaginatively generating the sound of a familiar voice (Grandma’s, perhaps) as it comes through the speaker. Picciuto and Carruthers (2016), in contrast, remain officially neutral about the sort of imagining that is involved in pretense (whether propositional supposing or imagery rich in nature).

For our purposes these differences will not matter. We propose to understand imagination quite broadly, to incorporate any form of mental representation of a thing, event, or state of affairs that does not involve any sort of commitment to the existence of that thing, event, or state of affairs. So imagination is the representation of the merely possible, without any kind of commitment to the truth or reality of what is represented.

This broad description of imagination excludes online perceptual representations, which have a judgment-like role in presenting the actual world to us, guiding our planning and giving rise to new beliefs by default. Moreover, it obviously excludes propositionally formulated judgments and beliefs, including counterfactual beliefs (such as the belief that John would have won the race if he had not fallen) which are committed to the truth of what they represent. It also excludes memories and episodic memory images, since these, too, are committed to the correctness of what they represent. In addition, our account excludes representations of the not-currently-actual events specified in one’s intentions and goals. Such states also commit one to the potential existence of the represented states of affairs. Intending to bring it about that P is a way of being committed to the future truth of P—one is committed to making it the case that P. In contrast, affective states of wanting or desiring something *do* qualify as constitutively involving imagination, on our broad understanding. For felt desires represent merely possible states of affairs without (yet) being committed to their future existence.

Thus our broad definition of imagination includes episodes of supposing something to be the case as well as acts of visualizing non-actual properties, as when one imagines the dial-buttons of a telephone imposed onto the sight of a banana. It also includes the representations of possible future actions and outcomes that one employs when engaged in prospective reasoning prior to decision making (Gilbert & Wilson, 2007), and feelings of desire directed at the thought of becoming rich, or at the thought of speaking with Grandma on the telephone. In addition, it includes the passing thoughts and images that occur to one without judgment or endorsement when mind-wandering, as well as offline rehearsal in inner speech of things one might say or could have said better. (What begins as imagination can transition into belief or intention, however, as when one accepts—believes—the outcome of an imagined thought-experiment, or as when one decides in favor one of the future options one had been considering.) With imagination understood so broadly, it will be a significant achievement if we can show that pretend play need not—and often does not—constitutively involve imagination.

Importantly, we also propose to assume a form of realism about mental representation. We allow that children engaged in pretend play are generally interpreted by observers (from “the intentional stance”; Dennett, 1989) as imagining things; indeed, it is quite natural for observers to do so. But it is a further question whether these interpretations are correct, and whether children when pretending are actually employing (consciously or unconsciously) any noncommittal

representations of merely possible states of affairs. We propose to argue that they are not, at least in cases of what we will call “core pretense.” Our question in this paper, then, is about the mental representations that actually undergird and guide pretense, and whether those representations must be noncommittal in nature, or can rather just involve beliefs and perceptions of various sorts.

We allow that pretense can (and often does) *involve* imagination, but we deny that it *must* do so. In what follows, we will argue that all of the above accounts are mistaken when construed as theories of the *core nature* of pretense. Theorists have been misled, we suspect, by the ways in which pretense often manifests in the WEIRD cultures to which academic philosophers and psychologists generally belong. (WEIRD stands for western, educated, industrialized, rich, and democratic; such cultures are extreme outliers in human history along many different dimensions, including psychological ones; Henrich et al., 2010.) In these cultures, adolescents and adults frequently engage in pretend play, adult caregivers initiate and participate in games of pretense with their children, and fantasy forms of pretend play are common. None of these things are true in traditional cultures. In traditional societies pretend play ceases around the beginning of adolescence; adults do not generally engage in pretend play at all, either among themselves or with children; and fantasy forms of pretense are comparatively rare (Haight et al., 1999; Lillard, 2017).

In short, while pretense may frequently be accompanied by imagination in WEIRD cultures, and can often constitutively involve it, we will show that this does not have to be the case. And if one's goal is to characterize pretense as a psychological natural kind (as ours is), then one should surely look to those manifestations of it that are universal, and thus common to *all* cultures. We embark on that task in Section 2. What will emerge is that universal—or “core”—pretense is much closer in nature to imitation than it is to any form of imagination; where by “imitation” we mean the intentional copying of a sequence of behavior, whether from observation or memory.¹

We should stress at the outset that there is good reason to think that pretense does *have* a core—innately channeled, cross-culturally universal—nature. It is exhibited by almost all children in every culture that has ever been studied, even in those where it is actively discouraged by adults (Carlson et al., 1998; Gaskins et al., 2007). It also appears on a fixed developmental timetable—first manifesting in the second year of life, and then peaking in frequency between the ages of three and five (Haight & Miller, 1993). Moreover, in traditional cultures it disappears on a fixed timetable as well, generally ceasing altogether by around the age of 10 or 11 (Smith & Lillard, 2012).

The question of the core nature of pretense is closely related to the issue of what pretense is *for*, or what its *function* is. Many proposals have been made in the literature. It has been suggested that pretend play serves to develop capacities for reasoning and counterfactual thinking (Harris, 2000; Weisberg, 2015); that it is for developing a theory of mind, or an ability to “mindread” (Harris, 2005; Leslie, 1987); that it strengthens executive-function capacities (Bergen, 2002; Carlson et al., 2014); that it is to develop adult creativity (Picciuto & Carruthers, 2012; Russ et al., 1999). It is possible that pretend play has some role in the development of all these capacities. Lillard et al. (2013) offer an extensive review of these and other proposals, however, arguing that the evidence alleged to support them is shaky at best.

¹This is distinct from the kind of imitation sometimes described as “goal emulation”, where one copies just the end-state of the behavior without attention to the means (Tomasello et al., 2005); and also from automatic behavioral mimicry, like contagious yawning.

Our own view is that the primary function of pretense is to enable the acquisition of culture-specific skills, abilities, and knowledge. In making this general claim we agree with Bogdan (2005), but our argument (in Section 2) will differ in stressing especially cross-cultural and anthropological data on pretend play. Moreover, we develop it into an argument for an imitation-like core nature of pretense. Our proposal turns out to coincide quite closely with the analysis offered by Langland-Hassan (2014), who suggests this: To pretend to \emptyset is to intentionally act in ways that resemble \emptyset ing without intending to actually \emptyset (and without believing that one is). But while Langland-Hassan's view is intended as a piece of traditional conceptual analysis, our own project is causal-explanatory in nature; and we argue (in Section 3) by means of a sort of *task-analysis*: Considering the minimum psychological states and representations necessary to explain many instances of pretend behavior. Moreover, our account, unlike his, is only meant to provide a set of mental states that are sufficient to account for the core nature of pretense, while allowing that a richer set including imaginative ones may be necessary to explain many actual instances of pretend play (especially in WEIRD cultures). Finally, in Section 4 we consider and defend a prediction of our imitation-like account; namely, that pretense need not engage emotional processes in the way that imagination characteristically does.

2 | PRETENDING ACROSS CULTURES

The background framing for our discussion is provided by the work of Henrich (2016) and others, who use a wide range of psychological, ethnographic, evolutionary, and formal-modeling data to demonstrate that culture and cultural learning provide the key distinguishing characteristics of human beings as a species. It is cultural evolution and cultural learning (combined with some individual inventiveness) that explains how humans have successfully colonized every sort of environment on the planet. An individual or group naïve to the local culture, no matter how smart and well-educated in Western science, would not survive more than a few days or weeks in many of these environments, as Henrich (2016) notes. The most basic developmental task for a human child, then, is to become a fully competent member of the local culture. This means acquiring the local language, as well as internalizing the culture's norms and religious practices; but it also means acquiring the knowledge and skills that are needed to become a successful and productive adult member of the society.

We should stress that most models of cultural evolution and cultural adaptation to the environment are built around *imitation* as the main engine of cultural transmission (Henrich, 2016; Lewis & Laland, 2012; Richerson & Boyd, 2004). Moreover, it is widely agreed that imitation plays a fundamental role in human development, involved in everything from language acquisition to empathy (Arbib, 2011; Byrne & Russon, 1998). Human infants and young children have a drive to imitate the behavior of those around them (Barr et al., 1996; Gergely et al., 2002; Over & Carpenter, 2012). So, a view that ties the universal disposition of young children to engage in pretend play to their motivation to imitate others has some initial plausibility.

Since what is at stake in our discussion are the psychological/representational underpinnings of pretense, we cannot demarcate the target of our inquiry in psychology-involving terms at the outset. Instead, we will confine ourselves to behaviors that fall within the agreed *extension* of pretense, respecting the differences between pretense and other kinds of play. Gosso et al. (2005), for example, studied different forms of play across a number of Brazilian communities, distinguishing between pretend play (including role play and fantasy play); physical-exercise play (swimming, climbing); social-contingency play (tickling, peek-a-boo);

rough-and-tumble play (wrestling, play fighting); construction play (e.g., building a mud dam across a stream); and games with rules, such as hop-scotch and soccer. Across all five communities studied, the most frequent forms of play were pretense (37%), physical-exercise play (29%), and construction play (17%).

It is worth noting that although Gosso et al. (2005) themselves adopt a definition of pretense that involves projecting an alternative (imagined) representation onto reality, they make no attempt to test for this directly. In fact here, as is generally the case in the empirical literature on pretense, pretending is judged on behavioral criteria alone. Children are judged to be pretending if they engage in an action that imperfectly copies a real performance of some sort, but seemingly done for its own sake (for fun, as a form of play), without any indication that the child is trying but failing to complete the real activity. Although children behaving like this are generally interpreted as *supposing* (Nichols & Stich, 2003), as *imagining* (Picciuto & Carruthers, 2016), or as *projecting an imagined overlay onto reality* (Carruthers, 2006; Lillard, 2001), we will suggest that all of these accounts are *over-interpretations*. They certainly go beyond the data.

Turning now to the nature and role of pretense within traditional communities, Lancy (2015) provides a review of pretend-play activities across a wide range of hunter-gatherer and subsistence-farming cultures. There are a number of striking findings. One is that children have generally acquired most of the skills necessary for successful adult work by about the age of 10 (when pretend play normally ceases). And although pretend play is ubiquitous among children across cultures, much of that play is a sort of work-play, closely mirroring the subsistence-skills needed by the community. Young boys in hunter-gatherer tribes, for example, play at tracking and hunting animals around the camp, gradually transitioning to killing or trapping small animals for the pot (Liebenberg, 1990). In many of these communities even toddlers are permitted to handle adult tools, including sharp knives and axes (Lancy, 2016). And across almost all traditional societies, adults take the view that children will learn things by themselves. Attempts at explicit teaching are rare, and adults rarely engage in pretend-play with children. In addition to work-play, children's role-play, too, is mostly focused on imitating the cultural roles and practices they observe around them. Lancy (2015) summarizes the findings of his review of play in these traditional communities thus: "Our current [WEIRD] understanding of play as the antithesis of work is atypical ... it is very clear that critical skills are being acquired and applied through playful work" (p. 554).

To similar effect, Edwards (2000) reanalyzed data from a set of ethnographic studies collected in the 1950s, looking at play among children in small towns or villages across six cultures: in Kenya, Mexico, Japan, the Philippines, India, and a rural town in the United States. At the time, most of these communities were relatively isolated from WEIRD influences (with the exception of the town in the United States, of course). Fantasy play was found in all six communities, but much less in societies where children were not exposed to much novelty. Role play was quite common in all communities, however, and was generally heavily gendered, reflecting the nature of the communities themselves. In some communities (especially subsistence ones) role play often took the form of the kind of work-play discussed by Lancy (2015), where children imitated the working activities of same-gender cultural models, gradually transitioning into making genuine contributions to the household. Edwards summarizes and illustrates the role-play findings thus:

They [children] used mud, sticks, stones, and other natural materials to imitate adult roles of cooking, grinding, and plowing, and tied rocks and rags to their backs

as pretend babies. They also used knives, pangas [a bladed African tool like a machete], and axes to imitate adult work and food preparation, as early as ages 2 and 3. Smoking and telephoning seemed to be two adult pleasures that children avidly imitated. Small children also liked to play school in imitation of their older brothers and sisters. (Edwards, 2000, p. 335)

Note how naturally Edwards writes of children *imitating* others in describing his role-play findings. We will return to build on this idea in Section 3.

What emerges strongly from the anthropological literature is that children across cultures mostly enact culture-specific themes and activities that reflect the values and life-ways of their communities (Haight et al., 1999). It is reasonable to postulate, then, that the function of pretend play is cultural learning and culture-specific skill acquisition. Where the ambient culture is of a subsistence sort and contains only a limited range of adult roles and activities, pretend play will appear somewhat limited in its contents, and will often merge smoothly into forms of playful work. But where the culture contains a wider variety of more specialized roles, children's play will accordingly become more complex. In WEIRD cultures—where pretend play is actively encouraged by adult care-givers, as are creativity and imagination, and people have leisure to produce and engage with a wider range of cultural products (including books, films, and TV programs)—fantasy forms of pretense will become much more common, and much more varied. Nevertheless, it can still be true that the core, innately channeled, disposition to engage in pretense is about acquiring culture-specific skills and abilities.

Note that when suggesting that the function of pretense is cultural learning we intend “function” in the sense of “current function” (Cummins, 1975), as opposed to “adaptive function” (Wright, 1973). We are not in a position to know the precise evolutionary forces that led human children to have an intrinsic drive to engage in pretense. It seems likely, given the ethnographic evidence, that these would somehow have included imitation and cultural learning. But they might also have included pressures for the swifter development of executive functions. In fact, Lillard (2017) makes a case that play in general (including rough-and-tumble play, construction play, and so on) is an adaptation for developing executive-function abilities and for normal socialization, arguing that this function is shared with the play of a number of other creatures, including rats. One possible suggestion, then, is that *pretend* play results from combining the general disposition to engage in play of all sorts with the human-specific motivation to imitate others. If so, then pretense would be an evolutionary *spandrel* (Gould & Lewontin, 1979)—an interaction-effect of two distinct adaptations.

Whether pretense was directly or indirectly selected for, we suggest that the result is that children have an innately channeled disposition to copy (for fun) culturally salient roles and behaviors. At the very least, it appears that the core nature of pretense is imitation *like*. We next proceed to show that imagination is not among the cognitive requirements for many kinds of pretend behavior.

3 | PRETENSE AS PERFORMANCE

We suggest that the core nature of pretense involves the selection of culturally salient or culturally significant behaviors, persons, or scripts that serve as templates for generating pretend activities. In many traditional cultures the selected target is imitated quite closely, but with variations necessitated by the child's own abilities and available materials. Pretense is a form of

performance, then, insofar as it entails a close intentional matching between a behavioral template of some sort and one's own behavior.

It is only in cultures where pretend play is actively encouraged that more variations are introduced, leading to wider divergences between the selected target and the child's own activity (often for the further amusement of oneself or one's playmates). This loosening of the relationship between template and behavior can be a result of normal affective learning (when children are socially rewarded for deviating off-script). Alternatively, it can itself result from imitation of adult playmates who serve as exemplars, and who see themselves as required to encourage the child to be creative and imaginative—thus reflecting our particular WEIRD cultural *zeitgeist* regarding the importance of pretend play for children's cognitive (as opposed to social) development. (See Lillard & Taggart, 2017, for discussion and critique of the latter idea.)

While many parents in WEIRD cultures encourage “loose” pretense and fantasy pretense to foster imagination and creativity, it may not, in fact, lead to more flexible problem-solving. Nielsen et al. (2014) and Neldner et al. (2017), for instance, tested simple forms of tool innovation (bending a pipe-cleaner to form a hook) in 4-year-old to 5-year-old children across both WEIRD and traditional cultures. Very few children passed overall, with no differences in passing rates across cultures. Since fantasy forms of pretense are likely to be much more common in WEIRD societies, this suggests that pretending that goes beyond copying does little to enhance children's creative capacities (at least in the early years). Indeed, it may be that the kinds of imagination-involving play that children are encouraged to engage in by parents in WEIRD cultures perform no useful cognitive function over-and-above what could be achieved by simpler forms of imitation-based pretense (Lillard et al., 2013).

Pretending to do something is not the same as *really* doing it; nor is it just a failed attempt to do the real thing. And young children, too, are well aware of the difference between actually trying, but failing, to do something and pretending to do it (Rakoczy et al., 2004). So, in this respect pretending is like imagining in that it involves thoughts about what something is not. These negative thoughts are committal in nature, however, representing how things actually are in the real world. They are also limit-setting in character, setting the boundaries of children's imitative activities, in contrast to the positive non-factive imaginings that are alleged to initiate and guide a sequence of pretend behavior.

For instance, a boy pushing a stick through the dirt when pretending to plow a field knows that the stick is not really a plow, and that he is not really plowing; nor is he trying (but failing) to plow. But he can be imitating some of the actions and procedures used in plowing to the best of his ability given the limited tools available. Does he have to be supposing, positively and counterfactually, that the stick is a plow? He may be doing so, but he does not have to be. He can just be imitating his father (for fun) with whatever materials come to hand. And when he pretends to pause and rest on the plow as his father sometimes does, and leans on the stick, he does not put his full weight on it as his father would, for he knows that the stick will not bear his weight. So, he is simultaneously aware of the actual properties of the stick while at the same time using it as a prop (a plow) in his enactment of the plowing-a-field script. But that does not mean he has to be “mentally projecting”, or “overlaying”, an image of a plow onto the stick; nor does he have to be positively supposing that the stick is a plow, nor representing it as such.

Likewise, a little girl hitting some seeds with the end of an old broom handle is not really making flour, and knows she is not. But she is still copying many of the actions involved. Does she have to be *imagining* (in any sense) that the corn is being pounded into flour by her actions? She *may* be doing so, but need not be—that is not the point of the endeavor. Her goal is just to act as her mother acts given the available materials. Similarly, a boy pretending to be a panther,

slinking along on all fours before pouncing on a rag, knows he is not *really* a panther; nor does he have to be supposing that he is. He just needs to call to mind a memory of the way panthers behave, and then execute that behavior as best he can for fun. (And in doing so, note, he may be rehearsing and helping to consolidate locally important knowledge.)

Pretense always involves representations that are negative ones, then, and are thus in that weak sense counterfactual in nature. But (in contrast with Nichols & Stich, 2003), the representations in question can be truth-directed—believed—ones (“this stick is not a plough”, “I am not making flour”, “I am not a panther”). They are not representations of any merely possible state-of-affairs (hence they are not imaginative), and they need not play any active part in guiding the execution of the pretend activity itself. Nor do they provide the initial premises from which pretense emanates.

Consider the account of pretense offered by Stich and Tarzia (2015).² This is motivated by analogy with what they call “the imitation game.” In this game, various actions and events are displayed on a video screen, and the player imitates what takes place there more-or-less closely, using whatever materials and objects come to hand. If a person depicted in the video turns in a circle, the player would do likewise. If the person in the video picks up a telephone and says, “Hello Grandma, how are you doing?” the player might (if no telephone is available) put a banana to her ear and say something similar. And if a car moves across the screen with its engine rumbling, the player might pick up a pencil (if nothing more car-like is available) and push it along the surface of the table going “vroom, vroom.” The game can be played by multiple players, who can distribute the imitative load between them when multiple agents are displayed in the video.

Stich and Tarzia (2015) then say that “the pretense game” (i.e., pretend play) is just like the imitation game, except that instead of a video, players employ representations of events unfolding in their own minds. The claim is that in pretense, players are imitating (more-or-less closely, using whatever materials are available) the events that they imagine, or the events that unfold in their “possible worlds box.” Notice, however, that much of what can be displayed and imitated in this framework can be, not suppositional or hypothetical representations, but rather belief-like ones activated from long-term memory. And indeed, Stich and colleagues have always insisted that representations from memory—beliefs—can be activated into the possible worlds box. So memories of what cars look and sound like can serve as the template for pushing a pencil along a surface going “vroom, vroom”, and activation of knowledge of the talking-on-a-telephone script that can provide the template for using the banana as a telephone.

Moreover, there is no need, in order for the pretense game to operate as described in these cases, for the player to suppose that the pencil is a car, or that the banana is a telephone, any more than there is such a need when playing the imitation game. All that is required is that there should be some sequence of remembered events that can serve as a template to be imitated more-or-less closely, using some of the available materials. It is an unargued assumption made by Nichols and Stich (2003) and Stich and Tarzia (2015) that pretend play always has to be initiated and thereafter partly guided by some counterfactual—merely possible and imagined—representation that gets placed into the possible worlds box. We see no reason to grant this assumption. Any culturally salient memory or script, when activated associatively in the circumstances or prompted by others, will serve just as well.

²Stich and Tarzia (2015) are responding to Friedman and Leslie (2007), who had argued (against Nichols & Stich, 2003) that a meta-representational account of pretense is needed to explain the data. On this point, we agree with Stich and colleagues. Engaging in pretend play need not involve, nor is it best explained by, deployment of the concept PRETEND.

Someone might object: “But how *can* I use a pencil as a car without imagining that it is one? How could this *not* involve a contrary-to-fact representation of the way the world might be?” But the only mental representations that are needed to play the imitation game, in fact, are judgments or perceptions of greater or lesser *similarity*. Lacking any more genuinely car-like materials to use, but perceiving that the pencil affords grasping and movement, the child sees that it is similar enough to a car in its affordances to be pushed along the desk in imitation of the car’s movement. The only mental representations required are truth-directed/believed ones (“the pencil can be moved like a car” and “the pencil is not a car”).

As Stich and Tarzia (2015) themselves point out, there seem to be no strict rules or limits in the imitation game on how similar or dissimilar a performance must be to the target for the performer to still count as playing the game. But we suggest that children will normally seek to match the target of imitation as closely as they can given whatever limited materials are available. And indeed, Taggart et al. (2018) find that when children are presented with a choice between *pretending* to perform some activity (riding a horse, driving a tractor, feeding a baby, cutting vegetables, and so on) and doing the real thing, they overwhelmingly prefer the real activities. When they do express a preference for pretending, they justify their choice by citing worries about their own competence or safety (e.g., that they might fall off the horse). This comports nicely with an account of the nature of pretense in terms of an intrinsically motivated drive to imitate adult activities.

When remembered events or scripts become activated and serve as templates for pretend play, of course, they are likely to be at least partly imagistic in form. But this is not imagination in the sense that people generally intend in discussions of pretense. Indeed, anyone *imitating* an action, not from current observation, but from memory, will likewise be “imagining” (forming images of) that action. But imitation is not a form of imagination, on anyone’s view. When people say that pretense is imaginative, or constitutively involves imagination, they do not mean just that it involves memory images of various sorts. Rather, they mean that it involves suppositions or contrary-to-fact representations of the way that the world might be or might have been. Memory images, in contrast, are truth-directed or committal in nature.³

We can agree with Stich and Tarzia (2015) that *sometimes* what one imitates when pretending is something one has supposed or imagined; that *some* instances of pretense constitutively involve imagination, and that *sometimes* the represented events that get copied in pretend behavior are counterfactual ones. We just deny that this is the most fundamental or basic form of pretense. In the basic case, what gets imitated (more-or-less closely, for fun, in full knowledge that one is not doing the real thing) can be culturally salient scripts, roles, or activities drawn from memory.

Consider the example of a child pretending to make a telephone call, using a banana in place of a real telephone (Leslie, 1987). The child has observed the use of telephones among adults. She knows what the making-a-phone-call script involves. Suppose, then, that the child is motivated to *imitate* that behavior, but there is no telephone available (or there is, but the child is not permitted to use it). The making-a-phone-call script can be driven entirely by environmental affordances. A banana fits in the hand sufficiently like a telephone, and permits the

³It should be acknowledged, however, that episodic memory, on the one hand, and future-directed and counterfactual imagining, on the other, are increasingly seen as relying on overlapping brain networks and abilities (De Brigard & Parikh, 2019; Hassabis et al., 2007). Nevertheless, episodic memory is *factive*, intended to represent the way things actually are (or were), whereas imagination, in the sense employed in all discussions of pretense, is not. It is supposed to represent how things *could be*, or *would be* if something different were the case.

child to make tapping motions as if keying in the numbers. The child does not have to be actively *supposing* that the banana is a telephone, nor “overlying” an image of a telephone onto the banana. But she does have to bear in mind throughout, both what a telephone is (as she talks “into” the banana) and that what she is holding is really a banana (so she does not squeeze it too hard). Hence one can say that the child to some degree *behaves as if* the banana were a telephone while retaining the active knowledge that it is not. Of course, someone might say that, in acting as she does, the child is *tacitly* supposing that the banana is a telephone. But there is no reason to think that she needs to entertain any form of active symbolic representation (whether conscious or unconscious) with the content, *the banana is a telephone*.

A contrasting account of what serves to distinguish pretense mentally from other forms of play is that it has a symbolic nature (Baron-Cohen, 1987; Lillard, 2017). On this view, the child uses the banana to *symbolize* or *represent* a real telephone, and the child’s actions while pretending to be talking on the telephone then *represent* the action of talking on a telephone. We admit that on occasion a child *could* be doing these things. But this does not seem necessary, either. Granted, one can say that the banana *stands in for* a telephone in the child’s play, and in that sense represents it. And we grant, too, that third-party observers (especially in WEIRD societies) will often find it natural to see the child’s actions in representational terms (perhaps from our familiarity with genres of pretense that are genuinely representational, such as theater and film.) But it is one thing to say that the child’s *performance* represents a phone conversation with Grandma in the eyes of an audience, and quite another to say that the child herself is mentally representing that the banana is a telephone, or representing it as standing for a telephone. The child herself need not be employing the banana as a symbol for anything, in fact. Rather, she just represents it as similar enough to a telephone in its affordances to enable her to enact (i.e., to imitate) the making-a-phone-call script that she accesses from memory.

Fantasy play, too, need not be imaginative (although it can be). A child pretending to be Superman, rushing around the yard jumping over obstacles with a scrap of old cloth wrapped around his neck like a cape, *might* be imagining himself *as* Superman—imagining a big “S” on his shirt-front, for example, or that the rock he has just leaped over is the Empire State Building. But he need not be doing so. He may just be mapping his memories of some of the things that Superman does to his own behavior as best he can given his limited abilities, guided by environmental affordances (such as a rock to be jumped over). Notice that in remembering what Superman does, the child is recalling some of the content of a fictional (imagined) story. But the child himself need not be immersed in that fictional world. All of his focus may be on copying the remembered action-sequences as best he can.

When children negotiate roles in role play they may need to *say* things like, “I’ll be Superman, you be Lex Luthor.” In such a case the child’s speech seems to be representing himself as Superman. But it is not so clear that there need be any such identification in the child’s thoughts. The statement, “I’ll be Superman” can just as well be read as saying, “I’ll play the role of Superman” or, “I’ll do some of the things that Superman does.” (Notice that the statement, “I will be Superman” cannot be construed as literally true in any case.) The point of the game is to enact some of the actions of Superman and his arch-enemy Lex Luthor. So the children need to recall some of those actions from memory and then imitate or copy those actions as best they can in their own behavior. That is all. The children may-or-may-not be *imagining* themselves to *be* those characters while they perform. Indeed, not only is it unnecessary for a child playing the role of Superman to entertain in suppositional thought the identity, *I am Superman*, but this

might actually hinder the activity. For it will need constant correcting in light of the respects in which the child is *not* Superman.⁴

We should stress again that we do not deny that pretense *often* involves imagination (especially in WEIRD cultures); nor that what is imagined can play a critical part in the pretend activity. A child holding a conversation with his imaginary friend, for example, and telling her about the bullies at his school, may be actively picturing the presence of his conversational partner. That may be part of what enables him to find her imagined expressions of concern to be comforting. All we deny is that pretense is, in any sense, a form of imagination, nor is it always contingent upon imagination. Core pretense is more like partial or limited *imitation* than it is like imagination, in any of the latter's main varieties.

We suggest that the core (innately channeled, culturally universal) nature of pretend play is as follows: Someone pretending to \emptyset is (normally) intentionally performing an action that resembles (more-or-less closely) the activity of \emptyset ing, while doing so for its own sake (for fun), and while knowing that one is not really \emptyset ing. On this account, to pretend to be pounding corn is to perform actions (for fun) intended to resemble the activity of pounding corn while knowing that one is not really making flour. To pretend to be talking on a telephone is to perform actions (for fun) intended to resemble talking on a telephone while knowing that one is not really doing so. And to pretend to be Superman is to perform actions (for fun) intended to resemble Superman's while knowing that one is not actually Superman. This characterization is the simplest that is necessary to account for the data, and hence should be preferred on those grounds. Moreover, it is just what one would predict given that the function of pretense is the acquisition of culture-specific skills, abilities, and knowledge.

4 | AFFECT IN PRETENSE VERSUS IMAGINATION

We have argued that our imitation-like account of pretense is both suggested by the anthropological data and provides the simplest explanation of many familiar types of pretend-play episode. We now argue that the two accounts of pretense (imitation-like vs. imaginative) make contrasting predictions for whether pretend play should generally issue in content-related forms of affect (where the "content" of pretense is whatever event, person, or action is being pretended). We also show that the evidence (albeit limited) supports our imitational account. We develop our own view first, before turning to the implications of the imagination-based approach.

It is a prediction of our account that pretend play should generally fail to issue in content-related affect. That is to say, pretending to do something dangerous should not generally make one fearful; pretending to do something disgusting should not generally disgust one; and so on. If the function of pretend play is to imitate—for its own sake and without attempting to actually perform the activity—then one would expect pretense to narrow one's attentional focus to precisely that: *imitation*. All one's attention should be devoted to mapping the actions being pretended onto one's own movements, ignoring their wider significance, normal consequences, or affective coloring.

For instance, if a child is pretending to confront a ferocious predator armed only with a spear, it is not the content, *I am facing off with a deadly animal* that makes it fun. Rather, it is

⁴It is worth noting, in fact, that suppositional theories of pretense need to postulate additional mental capacities for "quarantining" the representations that are generated within the scope of the supposed content, preventing them from being employed as beliefs (Nichols & Stich, 2003). On our own account, this is unnecessary. Note, too, that one does not need to appeal to suppositions (or imagination generally) in order to explain how the child is not delusional in acting as he acts. That the child knows (represents) that he is *not* Superman is sufficient for that, combined with the knowledge that his actions *resemble* those of Superman (admittedly, to only a small degree).

the successful enactment of the child's "hunting script" that gives rise to his positive feelings, even when the content being pretended might otherwise be terrifying. What hunting the predator might mean in the larger context, or what the consequences of *really* engaging in that activity might be for oneself or others, need not be represented at all (although of course it can be).

It will help bring this point into focus to consider instrumental kinds of pretense, in addition to pretend play. Consider pretense undertaken as a form of deceit, for example. When pretending to be grateful for an unwanted gift, one must access one's knowledge of the ways in which grateful people behave (their facial expressions, their tone of voice, the things they say) and try to model one's own behavior on that. Here, the focus is on getting the correspondence as accurate as possible, and yet one does not generally induce real gratitude in oneself as a result. (If anything, one might feel guilty for engaging in the pretense at all.) In order to feel grateful, one has to actively modulate one's affective system in a top-down manner, perhaps by reminding oneself that the person means well and has gone to considerable trouble to obtain the gift. But notice that this now goes well beyond the original pretense; grateful people generally do not *need* to remind themselves that the giver means well.

Similar things may be true of games of pretense in role-play conducted jointly with others. A child playing the bad guy in a game of "cops and robbers" can take pleasure in successfully enacting his nefarious role, even when the real-life content of that role is unsettling, involving theft, bloody violence, callous murder, and so on. While the content of these games would surely be appraised as negative if real, in pretense they do not seem to engage children's value systems: Playing the robber in a game of cops and robbers is *fun*, and does not usually make children experience guilt or sadness. This is because they are focused on engaging in a successful enactment, playing the part well. When one acts the part of a robber shooting the store-owner, one is not attending to the criminal nature of the event, nor does one imagine the suffering of the victim or her family. Rather, one focuses on playing one's role by doing the deed with panache and escaping at speed in the pretend getaway car. Likewise when playing the role of the store-owner who gets shot, one is not focused on the pain or the loss of one's life, but on enacting a dramatic role, jerking back with the impact of the bullets and collapsing in a heap on the ground with a loud groan.

Indeed, given that stage-acting is a form of pretending, this is likely why so many well-respected acting techniques emphasize that one should use imagination during the production of convincing emotional performances—*mere* pretending (imitating) is not enough by itself. (Consider the work of practitioners such as Konstantin Stanislavski, Lee Strasberg, or Stella Adler.) While imitation of actions through pretense is important in theatrical performance, and while the performance itself depicts an imagined world, it seems that enacting the script fails to fully engage the affective system in ways that are believable. Thus actors often need to develop a rich imagined representation (either of the fictional events themselves, or of some related event from their own lives) to bring emotional realism to their roles. Indeed, some behavioral markers of emotion are involuntary, and *must* be generated firsthand in this way, as with the "Duchenne smile" (Ekman et al., 1990).

We have to admit that our argument in this section is mostly anecdotal. We are aware of no empirical investigations of the extent to which children feel negative emotions when engaged in negative forms of pretense. But anyone who has spent much time around young children knows that their pretense often involves scenarios that would evoke horror, guilt, or disgust if they were real. ("Look at me dad! I'm Fido rolling in some dog poop.") And yet the children still seem to be enjoying themselves.

Turning now to imagination-based accounts of pretense, we will argue that these predict, falsely, that pretense should generally elicit content-related emotions. It is now well-established that imagined events or outcomes are always appraised by one's affective systems, issuing in

some degree of positive or negative valence directed at the counterfactual situation in question. This is true in conscious forms of prospective reasoning and decision making (Benoit et al., 2014; Gilbert & Wilson, 2007; Miloyan & Suddendorf, 2015; Seligman et al., 2013), and it is also supported by the literature on decision making more generally. For whenever one makes a choice between potential outcomes, such as a certain sum of money versus a particular amount of juice or candy, the options are appraised by one's affective systems, producing an affective response (Bartra et al., 2013; Levy & Glimcher, 2012).

Admittedly, when choosing among counterfactual options in a low-stakes environment, one's affective response may be limited to some degree of valence directed at those possibilities, making them seem more or less good and attractive, or else bad and repulsive. Full-blown emotional episodes are unlikely to result, and one's affective response will not be visible to others (except via one's choices, or when lying in an fMRI scanner). But when what is imagined is represented vividly and in detail, and concerns matters that are in one way or another appraised as important, then one really does respond with emotions that can be recognized by others. Imaginative engagement with fiction, for example, often issues in full-blown content-appropriate emotions. When we picture Anna Karenina as she hurtles toward her doom, we appraise the imagined scenario as tragic and may weep with sadness. When we see a green slime monster stalking its victim on the movie screen, we appraise the imagined content as terrifying, and may gasp in horror. Thus imagined content (whether generated actively by us or more passively through perception of the artworks themselves) evokes the same sorts of affective appraisals it would trigger in real life, and often with similar intensity of output.⁵

Admittedly, this is not always the case. As is highlighted in discussions of the “paradox of horror” (or the “paradox of tragedy”), art-appreciators are often capable of enjoying fictional scenarios that would otherwise be appraised as bad-seeming or aversive. For instance, audiences often feel pleasure and exhilaration when watching depictions of perilous fighting and gore—images that would turn their stomachs in real-life. Importantly, however, in these cases one is arguably appraising not only the horrible content being imagined, but a host of other aesthetic and practical considerations that can modulate one's affective response. One way to achieve this top-down affective modulation is to down-regulate it. Knowing that one is safe in a cinema means that one's fear-response to the contents unfolding on the screen can be reduced to something more like anxious excitement. This can happen in nonfictional contexts too, of course. Think of the difference in affective response as one falls from an airplane with or without the knowledge that one is wearing a parachute, for example. So, one can find a gruesome Lovecraftian novel occasionally fear-inducing while admiring the writer's skill or one's own prowess at building rich imagined settings, resulting in overall enjoyment of the experience.

It appears that the intensity of one's emotional responses to imagined scenarios are partly a function of the appraised significance of those scenarios (whether terrifying, revolting, or uplifting, involving either oneself or someone one has come to identify with) and partly a function of the detail and vividness with which those episodes are presented. Since many episodes of pretend play will score high on both dimensions, imagination-based accounts of pretense should predict that children engaging in pretense will exhibit content-appropriate fear, disgust, or joy. We have already noted that children's pretense will frequently involve situations that would be highly emotive if they were real. And since pretense is, on imagination-based accounts, a form of externalized imagining—hence perceived and vividly represented—it should vigorously activate the relevant affective networks. But as noted earlier, this appears to be false in general.

⁵Some in the literature on the so-called “paradox of fiction” have challenged this point, but see Adair (2019) for a response.

Note that many of the activities that children in non-WEIRD cultures enjoy pretending are tasks that most adults would find onerous or disgusting, such as carrying a baby on one's back while working in a field, changing soiled swaddling, pounding corn, cleaning out a cowshed, and so on. Others will involve episodes that adults would find fear-inducing, such as confronting a dangerous predator armed only with a spear. But instead of feeling disgust or fear, the child seems to experience enjoyment. Someone might try to argue, of course, that children's negative emotions are top-down-modulated in something like the way that people's responses to horror-movies can be. But this is not a plausible suggestion. Young children (2-year-old children especially) are notoriously bad at regulating their affective responses.

While we have argued that standard imagination-involving accounts of the psychological underpinnings of pretense make a mistaken prediction, we should emphasize again that we do not deny that pretense *can* (and often does) involve imagination. And to the extent that it does, content-related emotions can be evoked. Thus a child might decline to engage in a pretense that there are monsters under the bed ("Too scary!"), because imagining those monsters produces fear. But it is not part of the core—innately channeled and culturally universal—nature of pretense that it should do so.

5 | CONCLUSION

We have argued that pretense and imagination are fundamentally different capacities. Indeed, pretense is more like imitation than it is like imagination; and imagination is not required for pretense. The core nature of pretense consists in imitation of some behavioral template or model, but done for fun, and in the knowledge that one is not really completing (nor is one trying to complete) the activity in question. One does not need to suppose anything, nor does one have to imagine a reality-altering overlay on what one is doing. But in WEIRD cultures, of course, pretense can be richly imaginative, especially when undertaken by adults. Our own experience suggests that when pretending with children, adults will often richly imagine the pretend episode. Adult forms of role play are often richly imaginative precisely so that they *will* evoke at least weakened forms of content-relevant emotion. (This is true of role-play in online games, for example, and in sexual role-play.) Indeed, this might be the reason why adult philosophers and psychologists so readily assume that pretense requires, or is a form of, imagination. But the core nature of pretend play—the psychological processes underlying the pretend behavior that is innately channeled and universal among children across cultures—is different, we have argued. Pretense is, at its core, imitative rather than imaginative.

ACKNOWLEDGEMENT

We are grateful to Chris Masciari, Aida Roige, and Shen Pan for comments on an early version of this article, as well as for feedback from Ruth Campbell and a number of anonymous referees.

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How to cite this article: Adair, H. V., & Carruthers, P. (2022). Pretend play: More imitative than imaginative. *Mind & Language*, 1–16. <https://doi.org/10.1111/mila.12417>