8
Pretense Part II
Psychology

8.1 Introduction

Last chapter, I introduced three distinct questions one might ask about pretense, labelling them the 'metaphysical,' 'epistemological,' and 'psychological' questions. So far we have addressed the first two. In tackling the metaphysical question, I argued that we can explain the difference between a person who is pretending and a person who is not without making any appeal to a *sui generis* state or concept of imagining (or of pretense). In response to the epistemological question, I argued that people—young children included—can recognize pretense in others without attributing mental states of believing, intending, or imagining to those judged to be pretending. Thus, the ability of young children to recognize pretense in others gives no reason to think they make use of the primitive mental state concept of PRETEND (or of IMAGINE) (*pace* Leslie (1987) and Friedman & Leslie (2007)).

We can turn now to the psychological question. This is a question about the mental states and processes that humans typically exploit in carrying out a pretense. Whether or not *sui generis* imaginings are strictly *necessary* for pretense, the vast majority of philosophers and psychologists working on pretense have considered imagination to be its cognitive engine (Carruthers, 2006; Doggett & Egan, 2007; Friedman & Leslie, 2007; Harris, 2000; Leslie, 1987; Liao & Gendler, 2011; Nichols & Stich, 2000; Schellenberg, 2013; Stich & Tarzia, 2015). If they are right, then any suitable answer to the psychological question will invoke *sui generis* imaginative states. The relevant kind of imagining in these discussions is A-imagining—the sort of imagining that allows us to engage in epistemically safe, rich, and elaborated thought about the possible and fantastical—even if some highlight the importance of visual imagery within such A-imaginings (see, e.g., Van Leeuwen, 2011).

Pretending requires an ability to act as though things are ways we believe them not to be. It stands to reason that doing so will require a general ability to have rich, elaborated, and epistemically safe thoughts about the possible, fantastical, unreal, and so on. So if we want to understand the nature of such A-imagining, we can start by asking what sort of mental states and capacities a person must exploit in order to pretend. If, after considering several paradigmatic pretenses,

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these states turn out simply to be beliefs, desires, and intentions of different kinds, then a case can be made that these *just are* the relevant A-imaginings that, intuitively, are relied upon during pretense. That is the case I'll be making over the next several sections.

8.2 The Question of Quarantining from a Light-Duty Perspective

When someone pretends, there is a sense in which they maintain two separate accounts of what is happening. There is the world as it is believed it to be. And there is the world as it is pretended to be. Suppose that Sally is pretending to be a lion. In the real world, Sally takes herself to be a five-year-old girl living in Massapequa, Long Island. In the pretend world, she is a mother lion on the Serengeti. In order for her successfully to carry out this pretense—and for it to remain pretense—she needs to keep a clear account of what is real and what is pretend. Metaphorically speaking, she needs to *quarantine* her take on how the world is imagined to be from her take on how it is believed to be. For many theorists, imagination plays a central role in explaining how this takes place. Sally imagines one thing (that she is a lion) and believes another (that she is a girl). It is in virtue of her only imagining the former (disbelieved) content that the state is "quarantined" from her proper beliefs. Before delving into a critical examination of those accounts, it is important to consider how the challenge of explaining this double-bookkeeping differs as a function of one's view on folk psychological ontology.

Recalling the distinctions of Chapter 2, if we are light-duty theorists, maintaining this double-bookkeeping amounts to Sally's having and manifesting two different sets of dispositions: dispositions to act like a five-year-old girl (ascribed, in part, by attributing her a belief that she is a girl) and dispositions to act somewhat lion-like (ascribed by saying that she is imagining that she is a lion). Having the latter set of dispositions does not amount to being disposed to act *exactly* like a lion—only to mirror some salient qualities of lions in one's behavior. There is no conflict in Sally's having both sets of dispositions simultaneously. For one thing, acting saliently lion-like is a fairly normal thing for a five-year-old girl to do, as is engaging in games of pretense generally. Dispositions to act like a five-year-old girl include among them dispositions to act saliently lion-like, robot-like, at-a-tea-party-like, witch-like, and so on, for any ordinary pretense. It is, in fact, only atypical children—for instance, those with autism spectrum disorder—who lack any such dispositions to pretend. So, from a light-duty perspective—where folk psychological state ascriptions *merely* serve to ascribe relevant dispositions, and not concrete mental representations—there is no potential clash between believing that one is a child and imagining that one is a lion. There is no interal state that needs to be quarantined from another, conflicting one. Even *prima facie*, pretense generates no need for quarantining, on a light-duty view.

It is only once we move to a heavy-duty folk psychological ontology that we get the appearance of a greater puzzle. In offering solutions to that puzzle, heavy-duty theorists take themselves to be giving a more substantive explanation of pretense than the light-duty theorist can provide. For they are no longer merely describing the dispositions characteristic of those engaged in pretense; they are advancing hypotheses concerning the casual bases for those dispositions—hypotheses that invoke mental representations of a certain sort. In Chapter 2, I aired some skepticism concerning the general project of explaining folk psychological dispositions in terms of corresponding mental representations. But I will set that skepticism to the side here, to consider matters as they stand on the heavy-duty theorist's home turf. For the remainder of this chapter, I will, for the sake of argument, assume that having beliefs, desires, and intentions amounts to having language-like and/or picture-like mental representations with contents mirroring those of the that-clauses used in their appropriate ascriptions. Where relevant, I will note how issues differ from a light-duty perspective.

8.3 Quarantining: The Central Mistake

Most heavy-duty theorists who have theorized about pretense argue that, in order to explain how people come to have and act upon the kinds of dispositions evidenced during pretense, we should posit the use of mental representations that are not themselves beliefs, desires, or intentions. These mental representations are typically called "imaginings"—especially "propositional imaginings"—and are the kinds of *sui generis* imaginative states I claim we need not countenance. There are several reasons theorists have thought that these states of imagining that *p*—unlike suspecting that *p*, or being thankful that *p*—are irreducible to more basic folk psychological states. But the most obvious and influential traces to the simple thought that imaginings are mental representations with contents that, at least often, we disbelieve. As the psychologist Paul Harris puts it, pretense is thought to depend "on the ability to temporarily entertain a representation that is non-veridical, and known to be so" (2001, p. 252). Far from a cleaned-up bit of common sense, this is a controversial piece of empirical speculation—one that takes a heavy-duty folk psychological ontology for granted. It brings with it special puzzles that don't arise on a light-duty view. For once we are committed to pretenders harboring and being guided by representations they know to be non-veridical, we face the question of how they avoid confusing those representations with their beliefs—how, in Leslie's (1987) term, they avoid "representational abuse." The worry is that a person might end up representing one and the same banana as both a fruit and, say, a telephone. Such confusion would result in people trying to peel receivers and charge bananas. It seems we need a way to *quarantine* the representations guiding pretense from our beliefs, thereby

preventing such confusion. Holding that we take a distinct cognitive *attitude* of imagination toward the relevant contents has been thought to answer the question of how this quarantining is accomplished (Nichols & Stich, 2000). It is observed that desire that *p* will not get mixed up with and contaminate a belief that not-*p*, due to the distinct attitudes taken toward the propositions. Just so, it is reasoned, if we take a distinct cognitive attitude of *imagination* toward the representations at work during pretense, this may serve to explain how a quarantine is maintained between what we imagine and what we believe.

This widespread view gets its canonical statement in Nichols & Stich (2000), who posit a "Possible Worlds Box" (subsequently dubbed the "Imagination Box") to sit alongside the more familiar "Belief Box" and "Desire Box" of heavy-duty cognitive architectures. The spatially suggestive metaphor of distinct "boxes" serves to strengthen the sense that a cognitive attitude is the right tool for the quarantining job (even if it is typically acknowledged that boxes only serve to symbolize functional similarities among representations—that they are "simply a way of picturing the fact that those states share an important cluster of causal properties that are not shared by other types of states in the system" (Nichols & Stich, 2000, p. 121)).

The problem with this general line of thought is that it just isn't clear why we should think that pretending requires a person to "entertain a representation that is non-veridical, and known to be so." If pretense does not require such, then there is no need to quarantine any representation that potentially conflicts with one's beliefs. The best way to think this through is to carefully consider which mental states a person needs to draw upon to carry out a pretense. Recall Sally, pretending to be a lion: she is crawling on all fours, saying "Rooooaaaarrrr!," swiping at the air with one arm, fingers bent in the shape of a claw. What, psychologically speaking, is required for her to carry this out? If this is a case of pretending to be a *lion*, she must be modelling herself after lions and not some other kind of creature. To do so, she needs to know something about lions. She doesn't need to know *much*. But if Sally has no idea what lions are, she cannot intend to make herself lion-like; perforce, she cannot pretend to be a lion (even if she might still inadvertently engage in behaviors that are lion-like).[1] Knowing some things about lions—that they walk on four legs, roar, and attack with their claws—she needs to draw on that knowledge to make herself *lion-like* in certain respects. Remembering that lions walk on all fours, she might decide that she will walk on all fours. Recalling that lions roar, she might decide to make a roaring type of sound. Being versed in games of pretense, she knows that her human roar needn't sound *very*

[1] This is compatible with our knowledge of *x*s only imposing loose constraints on our pretending to be an *x*. I agree with Doggett & Egan that, when you pretend to be a cat, "you're liable to act in accordance with the things that you know (or believe) about cats, but your beliefs needn't be rich enough to single out any particular sort of behavior that you think a cat would be liable to go in for in the imagined situation" (2007, p. 5).

much like a lion's roar. She knows that she only needs to go some distance toward making herself saliently lion-like. This might even involve her mirroring some actions that lions are only (stereotypically) *thought* to do, even if no lions actually take part in them. Such are the norms governing games of pretense, which she has learned through participating in such games with others.

On the face of it, her having and making use of the above intentions, beliefs, and desires suffices to explain her ability to pretend that she is a lion. Specifically, she exploits beliefs about the salient features of lions and the desire and intention to approximate some of those features in herself. To the extent that there are occurrent mental events responsible for the pretense, they can be events of *remembering* that lions are like such and such, and *deciding* to make oneself lion-like in this or that respect. All the while she retains a background belief that she is not, and will not become, a lion in the process of these actions. That belief ensures that she has not lost her mind.

Now, the orthodox view will likely agree that she has all these states—beliefs about what lions are like, and an intention to make herself lion-like—but will hold that something vital has been left out. The child, one might object, still needs to have an *imaginative state* with the content *I am a lion* (together with whatever other imaginative states might flow from it). This is the crucial mental representation that is "non-veridical, and known to be so." But it is hard to see what in Sally's actions requires us to say that she harbors such a representation. Why, in the process of remembering what lions are like and in making herself lion-like, would she need to mentally represent that *she* is a lion? She wants to *act like* a lion, not become one. Questions about what *she herself*—a five-year-old from Massapequa, Long Island—would do if, *per impossible*, she were a lion are not to the point. If she, herself, were a lion, then she would be a very odd-looking one, with remarkable, human-like cognitive capacities. If she herself were a lion, then her parents could not really be her parents at all—unless, somehow, they too were lions! Obviously, none of this comes to mind during her pretense. This is because, when we take part in such imitative pretenses, we are not making judgments about counterfactual situations where we ourselves are something else. We are just recalling the salient features of some type of thing—a lion, a hyena, a superhero—so as to mirror some of those features in our own actions and appearance.

Some have argued, to the contrary, that a child need not "consult" her beliefs in order to pretend (Doggett & Egan, 2007; Velleman, 2000, pp. 8–9). I do not know what it is to consult a belief—as one consults a tax professional?—but I agree that children don't do it when they pretend. Instead, they *make use of* their beliefs, in just the way we make use of our beliefs when we light the grill to make dinner, or when we drive to work. We don't pause to reflect on what our beliefs are about grill-lighting, or about the best route to work. Our beliefs guide our actions without our "consulting" them and (usually) without it crossing our minds that we have them. The same goes for pretending. Wanting to make herself lion-like, the

child draws on her beliefs about lions and their salient features, without noticing that she is doing so.

8.4 Inner Speech as Imagining? A Digression

It might nevertheless seem just obvious that Sally enters a mental state with the content "I am a lion," because pretending children often *say* things—either overtly, or in inner speech—like "I am a lion!" Let's suppose that I say "I am a lion!" in inner speech while pretending to be a lion. Is that mental episode not a good candidate for a case of imaginatively representing the proposition: *I am a lion*?

First, it is not obvious which sorts of contents are represented by inner speech episodes. There is some reason to think that the contents of inner speech utterances only relate to the *sound* of the relevant spoken sentences and not to the meanings of the sentences themselves (Jackendoff, 1996; Langland-Hassan, 2014a). But let us grant, for the sake of argument, that the mental event we would intuitively describe as "saying 'I am a lion' in inner speech" represents the proposition *I am a lion*. Even so, it would not be a good candidate for a *sui generis* imaginative state. We have a general ability to mentally represent linguistic content—both heard and produced—without believing it. When listening to someone speak, for instance, we need to grasp *what is said* before any decision is made about which attitude to take toward the content of the utterance.[2] By the same token, we can utter arbitrary sentences aloud without believing, desiring, or imagining them, as when reading aloud a dubious political manifesto. Matters don't change when we move an utterance inside the head. In cases where we aim for our utterance—inner or outer—to be sincere, there is some reason (for heavy-duty theorists) to think there will be a corresponding mental representation—a belief—whose content matches that of the utterance. But all bets are off in cases, such as pretense, where the norm of truth-telling has been waived. In the context of pretense, saying "I am a lion," either aloud, or in one's head, can be part of a performance, or a bit of role-playing. It needn't be seen as expressing an internal state with the content *I am a lion*. It could, instead, be caused by a belief that, for instance, saying "I am a lion" will indicate to others (or reinforce for oneself) what one is up to. Further, Sally could easily pretend that she is a lion *without* saying anything aloud, or in inner speech; her actions, in such a case, would still be driven by her imaginings (whatever they are). Thus, for the heavy-duty theorist who is

[2] This phenomenon—of grasping what is said without believing it—is addressed in more detail in Chapter 9, on engaging with fictions. While I am happy to allow that there is a level of mental representation where we represent the content of another person's utterance without believing (or disbelieving) it, this is a basic aspect of language comprehension and not a plausible candidate for a *sui generis* imaginative state. After all, we exercise this sort of ability to represent-without-belief in innumerable contexts where imagination is never invoked, such as when reading a philosophy paper we don't believe or understand, or when listening to someone who we think is mistaken or lying.

committed to *sui generis* imaginings being a unified type of mental state relied upon to guide pretense, inner speech cannot be the relevant state type.

If inner speech has a cognitive role at all in pretense, it is most likely in spurring reasoning on a certain topic (Martinez-Manrique & Vicente, 2010). I might silently repeat to myself, "I am a lion…I am a lion…" as means to focusing my thoughts on features of lions and on how to make myself lion-like. Of course, I could have, to the same effect, said in inner speech: "Ok, what are some features of lions? How can I make myself lion-like?" Moreover, the same processing could have been triggered if someone else, exhorting me to pretend, exclaimed "You are a lion…you are a *lion*!" Understanding and being inspired to act saliently lion-like by that person's utterance does not require, or even suggest, the use of *sui generis* imaginative states in the guidance of the pretense. Matters are not changed when the utterance occurs within my own inner speech.

8.5 Leslie's Tea Party—a More Complex Pretense

Many simple pretenses are just like the lion example. A person draws on her existing beliefs in generalizations about some type of thing in order to make herself somewhat like that type of thing, while believing she is not, and will not in the process become, that type of thing. Consider Leslie's (1987) example where a child pretends that a banana is a telephone. How does she keep the representation "the banana is a telephone" quarantined from her belief that the banana is *not* a telephone? Simple. She does not *have* a thought with the content: "the banana is a telephone." Instead, she has a desire to make the banana telephone-like—to handle it in telephone-like ways—even though she knows it *isn't* one. She draws on her knowledge of telephones to satisfy that desire.

A likely complaint is that the lion and banana-telephone pretenses are overly simple and that it is only in explaining more cognitively demanding pretenses that *sui generis* imaginative states suggest themselves. In granting that there is nothing in the nature of ordinary pretense that demands *sui generis* imaginings, this objection cedes ground to the proposal that the A-imagining that guides pretense can be reduced to a collection of more basic folk psychological states. It maintains, instead, that only relatively complex pretenses present a clear need for *sui generis imaginings*.

What will qualify as a relevantly "complex" pretense? It is difficult to say, *a priori.* Perhaps the least question-begging examples to consider will be those others have relied upon in motivating their arguments for *sui generis* imaginings. The banana-telephone example is one. I will examine another now—the tea-party pretense from Leslie (1994) mentioned earlier—which both Leslie and Nichols & Stich (2000) use to motivate their theories.[3]

[3] The following discussion of Leslie's tea party draws on Langland-Hassan (2012).

Here Leslie describes several key moments in a tea-party pretense that N&S also highlight as calling for special explanation:

> The child is encouraged to "fill" two toy cups with "juice" or "tea" or whatever the child designated the pretend contents of the bottle to be. The experimenter then says, "Watch this!", picks up one of the cups, turns it upside down, shakes it for a second, then replaces it alongside the other cup. The child is then asked to point at the "full cup" and at the "empty cup" (both cups are, of course, really empty throughout).
>
> (Leslie, 1994, p. 223, quoted in Nichols & Stich, 2000, p. 117)

Ten out of ten two-year-olds in Leslie's experiment identified the cup that had been turned upside down as the "empty cup" and the one that had not been overturned as the "full cup." The question of quarantining, as applied to this example, is the following: how does the child, who really believes both cups to be empty, keep track of the fact that one of the cups is "full" in the pretense, without falling into a kind of representational "chaos" or "abuse" (Leslie, 1987), whereby the cup is simultaneously represented as both full and empty? What sort of cognitive mechanisms and representations make this possible?

N&S's answer will be familiar by now: while the child believes that both cups are empty, she simultaneously *imagines that* one of them is full. Imagining that one is full, on their account, amounts to entering into a *sui generis* imaginative state with the content: *that cup is full*. Her imagining that one of the cups is full guides her pretense behavior; at the same time, however, she never comes to believe that a cup is full—she never represents that the cup is full in *that* way—and so never commits representational "abuse."

Following our earlier strategy, we need to see how the child can take part in the pretense without ever having a thought with the content: *that cup is full*. Begin simply with the uncontested data: when asked, as part of the pretense, which cup is empty and which is full, the child (correctly) answers the experimenter's question by identifying the cup that was turned over as the one that is "empty," and the one that was not turned over as the one that is "full"—while believing all along that both are really empty. What sort of beliefs, desires, intentions, and perceptual experiences must the child have to accomplish this? I will map them out in some detail, as doing so will be helpful to answering questions about the psychology of pretense in addition to that concerning quarantining.

N&S correctly note that the child must have a desire to engage in the pretense—she must "want to behave more or less as [s]he would if *p*" (where *p* is "we are having a tea party"). I don't, however, think it's necessary to invoke a conditional ("if *p* then *q*") in describing this desire. It's enough that the child wishes to act like someone at a tea party. To act on this desire, she must have some beliefs about how people typically act at tea parties. These, too, N&S allow the child must

have. N&S call such clusters of beliefs "scripts" or "paradigms" that detail "the way in which certain situations typically unfold" (2000, p. 126). And, of course, the child must be able to see (or otherwise perceive) what is actually going on. Is she being handed a cup, watching a kettle tip into a pouring position, being offered a cookie-sized object?

In my view, we can explain the child's behavior with these ingredients alone. Let's focus on the crucial step where the child correctly identifies the overturned cup as "empty," and the other as "full," even though both are believed to be empty. P will be used to indicate that a perceptual "attitude" is taken toward the content that follows, B for belief, and D for desire. (If one is suspicious of a genuine distinction between perceptual and belief attitudes, a B can be replaced for each P without affecting the account). I am continuing to work within the assumptions of a heavy-duty folk psychological ontology, where each that-clause within a mental state ascription implies a corresponding mental representation with much the same content.

P1: You say, "Let's have a tea party!" and start setting out dishes and cups. You do all of this with a familiar set of mannerisms [e.g., knowing looks and smiles, exaggerated movements and intonation, stopping actions short of normal goal points].

B1: *(inferred from P1)* You are starting a game where we act like people at a tea party, even if we're not at one.[4]

D1: I play this game, too.

P2: You are acting as if[5] you are pouring tea out of the teapot and into the cups.

B2: *(from D1 and P2)* I should act like you poured tea into the cups.

B3: *(from B2 and stored generalizations)* If you had poured tea into both cups, they would both now be full.

B4: *(D1 causes this to be inferred from B3)* I should act like both cups are full.

P3: You put down the bottle and say "watch this!"; you turn the green cup upside down and then put it back on the table, right side up.

B5: (*background beliefs)* When cups containing liquid are turned upside down, the liquid spills out. When full cups are not moved, they remain full.

B6: *(inferred from P3, B4, and B5)* If you had poured tea into both cups and overturned the green one, the green one would now be empty and the other one full.

B7: *(inferred from B6, due to D1)* I should act like the green cup is empty and the other one is full.

P3: You say, "Show me which cup is empty and which is full."

[4] This is the step where the child effectively recognizes that a pretense game is occurring—in line with my earlier discussion of pretense recognition, Chapter 7.

[5] "Acting as if" should from here forward be understood as equivalent to "acting in ways that would be appropriate if" and *not* as a mere synonym for "pretending that *p*."

D1—an abiding desire to play the game—then leads the child to use B7 in giving her answer: she points to the green cup to indicate that it is "empty," and then to the other to indicate it is "full."

Note that none of the beliefs appealed to here are "tagged" in any special way to indicate that they are not *real* beliefs (cf. Perner, 1991, pp. 53–67). Nor are these beliefs conceptually onerous—they do not, for instance, involve concepts of mental states. So, whether or not young children have well-developed concepts of folk psychological mental states, this account does not require it. In several places, the child desires to "act like" thus and such, and notes that the experimenter is "acting like" thus and such. This notion of "acting like" does not import or assume the notion of pretense; "acting like" here means the same as "acting as would be appropriate if," which we do when we are not pretending as well.[6]

The most distinctive aspect of the account I have sketched is that pretending that *the green cup is empty* does not involve the child's having a mental representation with the content: *the green cup is empty*. Nor does pretending that *the other cup is full* require a mental representation with the content: *the other cup is full*. Thus, at no time during the pretense does the child entertain a representation with a content that conflicts with—or even that "duplicates"[7]—that of any of her beliefs. This means that there is no mental state in need of quarantining. When the cups are initially "filled" during the pretense, the child does not need to infer (or believe) *that the cups are full*; rather, she needs to recognize that the experimenter is acting in salient tea-pouring ways, and to infer *that if tea had been poured into the cups, they would now be full*. And she needs to remember, going forward, that, as part of the game, they are acting like the cups are full. Instead of acting in lion-like ways—as in our earlier example—she needs to act in the-cups-are-full-like ways. Such beliefs and intentions pose no threat to any beliefs she has outside of the pretense. So it does not appear that a *sui generis* imaginative state must be exploited in order for a child to give correct reports about what is happening even in this relatively sophisticated group pretense.

8.6 Conditional Reasoning during Pretense

However, unlike the lion and banana-telephone pretenses, the tea party example involves the child inferring new counterfactual beliefs of the form: "if *x* had been the case, then *y* would be the case." Specifically, she infers that if a full cup had

[6] What makes these cases of "acting like" *x* is *y* cases of pretending that *x* is *y* is that they occur as part of a Pretense Episode, as defined in Chapter 7.

[7] Because the child *both* pretends that a certain cup is empty (after having been turned over) and believes it is empty, it might seem that an imaginative state is needed to capture the difference between *merely* believing it is empty and both imagining and believing that it is empty. But this is not so on the account I provide.

been turned over, it would now be empty. There is no reason to doubt that children have and make use of such beliefs. Harris (2001) details a variety of studies indicating that "young children [ages 3–4] have the competence for counterfactual thinking, spontaneously engage in such thinking, and deploy it in their causal judgments" (p. 252). And, of course, many who hold that imaginative states are relied upon in pretense do so because they think that such states are required for one to engage in the necessary hypothetical and counterfactual reasoning. For instance, on N&S's account, beliefs in conditionals of the form "if *p* then *q*" are in fact what guide one's pretending that *p* (2000, p. 128). N&S propose that, in order to *arrive at* such beliefs, one must first have a representation with the content of the conditional's antecedent (e.g., *p*) in the "Possible Worlds Box." On their view, when one wants to know what would happen *if p*, while not believing that *p*, one can safely store the proposition *p* in the "Possible Worlds Box" ("PWB") (or "Imagination Box" (Nichols (2004a)), and there carry out the inferences that rationally follow from it, given one's other beliefs. (Currie and Ravenscroft (2002, Ch. 2) espouse much the same view.) Thereafter, those inferences conducted "offline" can be imported into the consequent of a believed conditional with *p* as its antecedent. Indeed, according to N&S, it is the evolutionary function of the PWB to enable hypothetical reasoning (2003, p. 58). However, the PWB itself has no direct connections to action control systems (2000, p. 128).

I've already argued, in Chapters 5 and 6, that inferring new conditionals of this sort does not require one to represent the antecedent of the conditional "offline" (or in a PWB)—and, indeed, that doing so would be redundant. Anyone who would infer 'if *p* then *q*' after representing *p* via a *sui generis* imaginative state already has all the beliefs they need in order to infer the conditional without use of the imaginative state. Here I will offer a few additional remarks to bolster that account and indicate how it applies specifically to pretense.

Suppose that I want to reason hypothetically about what would happen if a wild boar entered the classroom during a college lecture. Call the proposition that a wild boar enters the classroom during a college lecture '*b*.' The desire to know what would happen if *b* will cause me to access whatever relevant generalizations I have stored about wild boars, college students, classrooms, professors, and so on. A few come to mind: wild boars are dangerous and excitable ('*w*'), wild boars getting loose in college classrooms is highly unusual ('*u*'), people are shocked and excited by highly unusual events ('*s*'), college students like to take pictures of exciting and unusual events on their phones ('*p*'), college students are frightened by dangerous animals ('*y*'), people scream when they are frightened ('*f*'), and so on. Having brought these generalizations to mind, I'm able to infer, *on their basis*, that if a wild boar enters a college lecture, then a dangerous, excitable animal will be loose in the room, shocking and causing fear in students, who will scream and try to take pictures of it with their phones. There is no need during all of this to put *b* (a representation with the content "a wild boar enters the classroom during

a college lecture") itself in either the belief or desire "boxes"—or any box at all. Hence, there is no need to quarantine *b*. Turning back to the issue of pretense, if I want to *pretend* that a wild boar is running amok in a college classroom, the inferred (and now believed) conditionals just mentioned will be sufficient to guide a sequence of pretend behavior. I will have determined some likely results of it being the case that *b* and can rely on them in acting as would be appropriate if *b*.

On this picture, there is no need for quarantining during pretense *or* hypothetical reasoning, as neither require us to entertain contents we disbelieve. Nor is there any peculiarity in a person's ability to imagine or pretend that *p* while not believing that *p*—or indeed while believing that *p*. For the activity of imagining that *p*, *in these cases*, consists merely in retrieving one's beliefs in generalizations relevant to the proposition that *p* and using them to make judgments about what would likely happen if *p*, all of which may (or may not) guide a sequence of pretend behavior. There is no reason to think that one's ability to do any of this would be hampered or confused by a concomitant belief that not-*p*, or that *p*.

As for the pretender's ability to distinguish what is happening in the pretense from what is true outside of the pretense, the main difficulty is removed once we give up the idea that a cognitive system must sort through contradictory representations (e.g. 'the telephone is a banana' and 'the telephone is not a banana'), or through multiple copies of the same representation (e.g. 'the cup is empty' (as pretended) and 'the cup is empty' (as believed)), in distinguishing the actual from the pretend.

8.7 Inferential Disorderliness and the Outlandish Premise

Nichols & Stich note that when pretenders elaborate the details of a pretense, they often do so through a series of inferences that mirrors the beliefs they would form were the pretense real. Nichols (2006a) calls this phenomenon "inferential orderliness." In the tea party example, when one of the cups is overturned, the children infer that it has become "empty," just as they would have come to believe it was empty had it actually been filled and then overturned (or if they had simply learned through testimony that a full cup was overturned).[8] Currie & Ravenscroft highlight the same phenomenon, suggesting that the attitude underlying

[8] N&S also stress that such inferential orderliness is only a norm; in many cases things are inferred in an act of pretense that one would not normally come to believe or act out in reality. When told to imagine that Bob was in New York yesterday and London today, we will *typically* imaginatively infer that he traveled to London by plane (as we would likely come to believe were we simply told this information). But there will also be cases where, for whatever reason, we fill out the scenario by imagining that Bob made the journey via teleportation, or by flapping his arms. So, there is latitude in imaginative inference—a possibility of divergence from what we would believe were the situation real, a possibility for inferential *disorderliness*—that must also be accounted for.

propositional imagination is "belief-like" in that it "preserves the inferential patters of belief" (2002, p. 12).

Nichols & Stich account for inferential orderliness by positing that the same "inference mechanism" is applied to representations in the PWB as in the Belief Box—an identity of mechanism enabled by the representations in each box being "in the same code." To explain the occasional divergence from patters of inference characteristic of belief, N&S posit another cognitive mechanism they call the "Script Elaborator," whose job it is to "fill in those details of a pretense that can't be inferred from the pretense premise, the (altered) contents of the Belief Box, and the pretender's knowledge of what has happened earlier on in the pretense" (2000, p. 127). They admit they "know little about how [the Script Elaborator] works" (p. 144).

If we avoid positing *sui generis* imaginative states, simpler answers are available. On the view I am proposing, the beliefs in conditionals and generalizations that guide inferences and behavior in a pretense are generally *the very ones* that guide the corresponding inferences and behavior in real life. For example, if I am told, "pretend that Bob was in New York on Monday, and London on Tuesday," I will typically infer, as part of the pretense, that Bob got to London via airplane, just as I would infer that he'd gone by airplane if I believed, through testimony, that Bob was in New York on Monday and London on Tuesday. This "mirroring" is due to the fact that we tend to fill out pretend and actual scenarios by appeal to the same beliefs about how things normally go; in this case, the relevant belief is that people who travel that far that fast usually do so by airplane.

Why do we do it this way? Why does imagining that *p* (and pretending that *p*) feed off beliefs concerning what would be likely if *p*? Here I think we have a pseudo-question. Imagining that *p* during a pretense *just is* bringing to mind or generating beliefs concerning what would likely happen if *p*, or generalizations concerning *p*-like situations, based on background beliefs deemed relevant. The question of why the inferences drawn "in imagination" mirror those that would be drawn from "isomorphic" beliefs is puzzling only if one begins with the view that the representations involved in guiding a pretense are quarantined in their own "box." Only then will it seem attractive to attribute the mirroring to a mechanism that treats the representations in both boxes roughly the same way.

8.8 Cognitive Attention—Asking Ourselves Questions and Holding Propositions in Mind

On the account I have so far sketched, pretending requires us to draw on background knowledge of various sorts. It may seem that this process of recollection—of searching our own minds for information of a specific sort—would itself require us to enter into *sui generis* imaginative states (or something comparable). For

instance, when pretending to be a lion, a child has to ask herself (though perhaps not consciously): what are lions like? When pretending to be at a tea party, I have to ask myself: what goes on at tea parties? Asking ourselves such questions allows us to focus on the pretense's subject matter, so as to retrieve what relevant knowledge we may have. While asking oneself a question is not the same thing as imagining a proposition, one might worry that I have just swapped the need to explain imagination for the need to explain the capacity to ask oneself a question. Further, it may seem that one of the important roles played by N&S's PWB—and *sui generis* imaginative states in general—is that it enables this sort of focusing of attention on a proposition.

In response, note first that such an attention-focusing role does not sit happily with the notion of a cognitive *attitude* of imagination. Psychological attitudes in general—such as belief, desire, and intention—do not, on anyone's account, have the function of focusing attention. We simply have too many beliefs, desires, and so on, for the attitudes themselves to account for how we attend to some (but not all) of them. If imagination really is "belief-like," or otherwise well characterized as a distinct cognitive attitude, imagining a proposition will not suffice for allowing one to cognitively focus on the proposition.

Second, the question of how attention is focused on a particular question or proposition, and relevant information subsequently retrieved, is entirely general, extending well beyond any questions to do with pretense or the consideration of hypotheticals. We ask ourselves questions as a means to retrieving relevant information all the time, without being tempted to describe ourselves as imagining. We might ask ourselves: "What's fifty-seven divided by ten?" "What kinds of things do they sell at Starbucks?" "Who is the governor of Ohio?" "How did I get here?" No one proposes to explain the mere raising of such internal queries in terms of a capacity for imagination. Matters are not changed if the self-initiated question has a hypothetical or counterfactual component. We can ask ourselves: What would happen if tea were poured into the cups? Or: How would physics have developed if Einstein were never born? Or: How would you feel if someone did that to you? The *mere* ability to turn our mind to a topic so as to retrieve information about it does not itself introduce the need for *sui generis* imaginative states. (And I have already argued that, once this information is retrieved, there is no need to token a *sui generis* imaginative state in making use of it.) Whatever mechanism or process enables attention to be focused on *non*-hypothetical questions and reasoning tasks will plausibly be the same one that allows focus on questions of the form: what would happen if *p*? So there is no motivation for thinking that it is only through entering a *sui generis* imaginative state that we are able to cognitively focus on a topic, question, or proposition.

Certainly, the process of asking oneself a question—so as to rustle memory or engage reasoning on a topic—is a cognitive ability that, like most, we would like to better understand. Yet, like the states of belief, desire, and intention, it is a folk

psychological kind to which all sides are committed, independent of any debates surrounding pretense or imagination. For that reason, it is the right sort of piece with which to explain pretense and imagination.

8.9 Freedom and Pterodactyls

More troubling for my view may seem to be situations in which pretenses diverge from any beliefs we are able to generate about what would happen if the pretend situation really obtained—that is, where we pretend that *p* and our doing so involves our pretending things we think are very *unlikely* if *p*. For instance, we might pretend that we are at a tea party where, suddenly, a tornado strikes. Yet tea parties are rarely visited by tornados. This pretense cannot simply involve drawing on general knowledge about what happens at tea parties.

This is simply a standard case of the general freedom of imagination, however, which can be explained as a freedom to reason about topics of our own choosing (see Chapter 1). In the case of pretense, this "freedom" consists in our ability to insert a new premise into our imaginative projects whenever we wish and to draw out further inferences from there. "Inserting a new premise" *n* to an imaginative project that *p* amounts to asking oneself what would likely happen if *p and n*. Sometimes this involves reasoning about the likely consequences of scenarios that are themselves unlikely. For instance, you might pretend that a tea party is in full swing—drawing on background beliefs about tea parties to do so—when suddenly, because the pretense needs some spicing up, you decide to also pretend that a tornado strikes. Whereas before you were acting on some beliefs about what would likely happen if *p*, now you are generating some inferences about what would likely happen if *p* and *n*. You use stored generalizations about tornados to reason about how they would affect a tea party. We still needn't conceive of the freedom of imagination as a freedom to token representations we hold to be false.

Van Leeuwen (2011) describes a related case involving improvisational comedians, as a means to challenging what he calls "conditional belief" accounts of imagining.[9] These are accounts on which imaginings drive pretense indirectly by enabling the formation of conditional beliefs—where these beliefs are the actual guides of pretend actions (he includes N&S's theory among such views, and would presumably include mine as well). The actors begin their performance by pretending to be knights dueling. Yet, before long, the pretend knights have mounted pretend pterodactyls, continuing their duel aloft. Here the pretenders seem to proceed, in imagination, in ways that have nothing to do with what they

[9] My discussion of this case draws on Langland-Hassan (2016).

really believe would happen if the instigating premise of the imagining ("We are knights dueling") were true.

Focusing in on this case, suppose that Actor A starts the pretense by imagining that *I am a brave knight at a duel*. If imagining is just a matter of drawing out likely consequences from an initial premise *p*—or, in my terms, bringing to mind some generalizations about what happens in situations like *p*—then we should expect A's imaginings to unfold in accord with what A thinks would happen if *p*. On N&S's view, he might infer a conditional of the form: "If I were a dueling knight, I would be holding a sword . . . An opponent would be trying to stab me . . . I would speak in a formal cadence." And he will have arrived at this belief by a process of inference that took place via *sui generis* imaginative states in his Possible Worlds Box. For the consequents of the conditional are things he might come to infer if he believed the initial premise. On my view, it might be that the actor imagines that he is a knight by bringing to mind some generalizations, such as "knights engage in duels" and "knights hold their swords like so," using them to guide his knight-like behavior. And while he may infer related conditionals in the process, we need not assume that the beliefs that end up driving the pretense are always beliefs in conditionals (as emphasized in section 8.3, with respect to the child pretending to be a lion).

But how do we explain the sudden transition to imagining that they are jousting on pterodactyls? That is *not* something knights generally do. At this point, the ordinary process of thinking through the likely consequences of *p*, or of thinking about generalizations relevant to *p*, is interrupted by a desire for something more comedic to occur in the performance. (Their job is to entertain, after all.) Actor A decides that his riding a pterodactyl would be funny (more on this decision in a moment). This leads him to "intervene" on his prior imagining by asking himself: "What if I were doing all this *while riding a pterodactyl*?" This intervention may lead him to draw some further inferences concerning things that would happen if he were somehow riding a pterodactyl. He might not be too sure about what would happen in such a weird situation. But, for a pretense, he gives it a shot and doesn't worry if he's off base; it won't matter much for his purposes of entertaining. It occurs to him that pterodactyls *fly*. So he may draw some inferences about what would happen if he were dueling while *flying* on the back of a pterodactyl. Here he has to make use of whatever relevant background beliefs he has. He likely has some about *riding animals* (it's bumpy, they can be difficult to harness). He likely has some about *flying animals* (they go up and down). He likely has some about *people at great heights* (they get nervous). He might have some about *pterodactyls* (they are aggressive). All of these can now feed into his behavior, at his discretion. The general point is that, whenever an imagining diverges into something unusual or bizarre, this is because a new premise has been added to the initiating premise as a conjunct. This amounts to the agent's bringing to bear some other body of knowledge—e.g., about pterodactyls or riding animals—in order to

enrich her pretense behaviors. In some cases a new conditional is inferred in the process; in others, we simply judge that we can make ourselves somewhat like some other sort of thing by doing thus and such.

Most of the pretend premises (e.g., I am swinging my sword) are discarded at some point during the pretense. This is why considering the conjunctive conditions and what would follow from them does not become unmanageable. Yet some premises remain as guiding themes (e.g., I am a knight). To add a new premise is just to bring to mind a new set of generalizations and use them in conjunction with the other background beliefs already being exploited. This allows the imaginative episode, as a whole, both to be constrained by one's existing beliefs and to freely diverge from anything one would infer from the initial premise alone.

Why did Actor A insert a premise having to do with *pterodactyls*, and not something else? Well, he wanted to shift the pretense to something more surprising, funny, and unusual—to something that would suit his goals, *qua* improvisational comedian. But why pterodactyls, in particular? Here the answer must trace to specifics of his psychology: what has he recently thought of or seen? What kinds of things does he generally find funny or surprising? Did someone mention dinosaurs earlier in the performance? The important point is that the answer will not involve positing a novel cognitive *mechanism*, process, or *sui generis* state. Coming to understand the work that N&S set aside for the Script Elaborator becomes part and parcel with understanding an agent's goals, intentions, and decisions more generally.

It is worth noting that the interesting question of why one premise ("I am a knight in a duel") is followed by another, outlandish one ("We are riding pterodactyls") is no better explained by appeal to *sui generis* imaginative states—be they propositional states or, as Van Leeuwen (2011) prefers, imagistic ones. We still face the question of *why* one *sui generis* state, and not some other, follows the previous one. The problem Van Leeuwen was after is that, in some cases, there seems to be no candidate *belief* that can play the relevant pretense-guiding role, because we simply don't believe conditionals of the right sort. That problem is solved by the allowance that we can insert new premises to our pretenses at will, via new conjuncts within the antecedent of the conditionals. We will do so whenever it serves our purposes. This answer, appealing to our intentions and desires, also provides a general account of why one outlandish premise might follow another—one that, it seems, most any theory must accept in broad outline.

8.10 Autism and Pretense

Before leaving the topic of pretense, I want to discuss one further argument that has been given for positing *sui generis* imaginative states—one that is quite

different from others we have so far considered. Both Nichols and Stich (2003, p. 129) and Currie and Ravenscroft (2002) invoke a distinct cognitive attitude of imagination not only to explain pretense, but to explain third-person mindreading as well (where "third-person mindreading" is the ability to understand and predict others' behavior by inferring their mental states). Just as pretense, on their views, requires an ability to entertain and draw "belief-like" inferences from propositions one does not believe, so too does mindreading intuitively require the ability to take another's (potentially different) belief set into account and draw out implications from those beliefs "offline," so as to predict that person's behavior. If both mindreading and pretense capacities are sometimes simultaneously impaired while other higher cognitive capacities remain intact—as some argue is the case in autism spectrum disorder (ASD) (Baron-Cohen, 1989, 1995)—this would suggest that a single system underlies both. The idea that a single cognitive system, module, or attitude underlies both meshes well with the view that there are *sui generis* imaginative states, where such states are supported by this impaired system (though the support would be considerably stronger were a *double* dissociation available—such that other individuals are found capable of complex pretenses and mindreading, yet severely impaired in ordinary first-order reasoning). By contrast, on the view I have proposed, where imagining does not involve use of any *sui generis* type of mental state, there is no obvious reason to expect these two disabilities to co-occur.

There are two main problems with both N&S and C&R's appeal to these deficits in support of their theories. The first is that many people with ASD retain other abilities that N&S and C&R associate with imaginative states, while still showing the characteristic difficulties with mindreading and pretense. For, on both accounts, not only does the PWB (or "belief-like imaginings" for Currie and Ravenscroft) underlie our ability to engage in pretense and mindreading, it also allows for hypothetical and counterfactual reasoning. Yet hypothetical and counterfactual reasoning (and "supposing") *per se* are not impaired in children with autism. This removes any special support that the dissociations witnessed in ASD might lend to N&S and C&R's views.

Indeed, Scott et al. (1999) found that autistic children outperformed normal children of matched verbal age on some counterfactual reasoning tasks.[10] Interestingly, the performance of the autistic children declined only once they were prompted to form visual images while considering their answers to the questions.[11] Peterson and Bowler (1996) found that children with ASD responded appropriately to explicit counterfactual questions, such as "If Mummy hadn't

[10] Though see also Grant, Riggs, & Boucher (2004) for evidence of a link between counterfactual reasoning and mindreading abilities in children with autism.

[11] These results have been criticized (Leevers & Harris, 2000) as being due to a bias of autistic children to answer "Yes" to questions (the correct answer to each of the questions was in fact Yes). Yet, as Scott and colleagues point out, this fails to explain why their answers became considerably less

made the cake, where would the chocolate be?" and, in a later study (Peterson & Bowler, 2000) showed that autistic children have a facility with a kind of hypothetical reasoning they call "subtractive reasoning." Normal false-belief tasks can be rephrased using "subtractive" prompts such as "If the marble had not been moved, where would it be now?" in lieu of "Where does Sally believe the marble to be?" When the tasks were rephrased in this manner, autistic children were able to provide correct answers at levels comparable to those of their non-autistic peers. Further, children of all kinds they studied—normal, autistic, and with learning disabilities—who could not answer the subtractive questions could not answer the false-belief questions, either. This leads Peterson and Bowler to conclude that subtractive hypothetical reasoning, preserved in autism, is necessary but not sufficient for the kind of mindreading required in answering ordinary false-belief questions.

Hadwin and Bruins (1998) have also found that children with ASD can formulate counterfactual antecedents and consequences for various episodes. For instance, one child suggested that by wearing boots a story character could have prevented getting her socks muddy. And Jarrold et al. (1994) found that children with autism were able, when prompted, to engage in "object substitution" pretenses—pretending, e.g., that a pencil is a toothbrush—with equal facility to controls of equivalent verbal mental age (Jarrold, Boucher, & Smith, 1994). Further, we should remember that the mindreading deficits of autistic children are of special interest in the first place because their abilities to make hypothetical predictions using other commonsense theories—in particular, with "folk physics"—are comparably intact (Baron-Cohen, Leslie, & Frith, 1986).[12] On both N&S and C&R's theories, there is no reason that the PWB, or one's belief-like imaginings, should falter when put to the task of predicting another's behavior, but not the course of a billiard ball. Likewise, studies investigating awareness of the emotions in autism have shown that children and adolescents with autism perform comparably to controls on so-called "upward counterfactual reasoning" (i.e., reasoning about how things could have gone better) yet are impaired in "downward counterfactual reasoning" (i.e., reasoning about how things could have gone worse) (Begeer, De Rosnay, Lunenburg, Stegge, & Terwogt, 2014). Again, there is no reason to expect a general deficit with *sui generis* imaginative states to show this kind of content specificity. Thus, the data from ASD provides no special support to N&S or C&R's theories. However we are to understand the mindreading and pretense deficits in ASD, our explanations must be more nuanced than

accurate (involving many answers of No) once they were encouraged to form images while answering the questions (the correct answers were still all Yes).

[12] Some high-performing individuals with ASD (e.g., mathematical savants) even show a pronounced superiority in counterfactual reasoning tasks over the general population. See Baron-Cohen et al. (1999) for a discussion of several such cases.

that the individual has an impaired mental module, or difficulty generating a certain type of (imaginative) mental state.

This is not to deny an important link between the relative lack of pretense in ASD and the more general deficits in social cognition (or "mindreading") in ASD. The proper place to look for an explanation, however, is not theories of imagination, but, rather, theories of social cognition more generally. The two should not be run together. Research on social cognition has boomed since the mid-1990s, when the leading theories were monolithic in nature. The main debate at that time concerned whether our ability to understand other minds relied on something like a scientific theory, or, instead, something more like a process of simulation (Davies & Stone, 2001; Stich & Nichols, 1992). Today, much of the exciting research on social cognition in autism concerns far more basic "embodied" capacities—such as the ability to attend to and understand facial expressions (Dawson, Webb, & McPartland, 2005), to unconsciously coordinate one's bodily movements with those of another (Marsh et al., 2013), or to attend to relevant social stimuli, such as faces and directions of gaze (Dawson, Meltzoff, Osterling, Rinaldi, & Brown, 1998; Dawson et al., 2004). Far from having a simple inability to imagine, or to generate "offline" versions of "online" mental states, people with ASD have been shown to have a broad array of sensorimotor and cognitive abnormalities—including arrhythmic gaits (Calhoun, Longworth, & Chester, 2011; Shetreat-Klein, Shinnar, & Rapin, 2014), diminished linguistic abilities (Sahyoun, Belliveau, Soulières, Schwartz, & Mody, 2010), kinematic motor abnormalities (Forti et al., 2011; Fournier, Hass, Naik, Lodha, & Cauraugh, 2010), aberrant emotional responses to their own facial expressions (Stel, van den Heuvel, & Smeets, 2008), and broader attentional and executive functioning deficits (Just, Cherkassky, Keller, Kana, & Minshew, 2007). Understanding the nature of the impaired social cognition in ASD requires understanding the ways in which these attentional, sensorimotor, emotional, and linguistic differences both engender and reinforce "higher" mindreading deficits that are more typically the province of empirically-oriented philosophers of mind (Van Wagner, 2017). That important project is well beyond the scope of this book. The lesson, for present purposes, is that the constellation of social, cognitive, and motor deficits seen in ASD do not constitute the kind of clean dissociation in abilities that would provide special support for positing *sui generis* imaginative states.

8.11 Conclusion

We have now had a close look at the metaphysics, epistemology, and psychology of pretense. This chapter considered the question of whether we in fact make use of *sui generis* imaginative states in some, or even all, pretenses. That question is distinct, in ways I have explained, from the metaphysical question of what it is to

pretend, and from the epistemological question of how we recognize pretense in others—both discussed in Chapter 7. A crucial step in undermining the claim that pretense draws on *sui generis* imaginative states, I have argued, is seeing that there is no need to "quarantine" certain mental representations during pretense. The supposed need for quarantining is often based on a groundless assumption concerning the cognitive-architectural requirements for hypothetical reasoning—namely, that to determine what would happen if *p*, one must token a mental representation with the content *p*. Nor does the tendency of pretense to gravitate toward the absurd give reason to posit *sui generis* imaginative states. When pretending, we are often motivated to reason about likely outcomes of scenarios that are themselves exceedingly unlikely. Our freedom to do so is one with the freedom of imagination (though not *all* cases of "the freedom of imagination" are to be explained in this way).

I also responded to the objection that my view tacitly posits something like a *sui generis* state of imagining in relying upon our ability to ask ourselves questions. This ability is something that occurs well outside of any contexts associated with imagination and is something all sides must provide an explanation of, independent of anything one wants to say about imagination. Finally, I argued that the pretense and other social deficits seen in ASD do not favor any particular views about the nature of imagination.