1. Conceptual Housekeeping.
"He has a good imagination."
"She suffers from a failure of imagination."
"She imagines a green tiger."
"He imagines that everyone is out to get him."
Distinguish between the faculty/capacity of imagination and the attitudes of imagining. Either can be a starting point for an investigation into what imagination is.

2. The Attitude of Imagination
Two questions:
(1) Are beliefs and imaginings different mental states?
(2) How do imaginings give rise to actions (in particular, pretense)?

Possible World Box
The dominant answer in the literature to (1) is Yes. The attitude of imagining that p is a distinct cognitive attitude (DCA). The core idea here is that just as there are two functionally distinct mental attitudes of belief and desire, so there is a functionally distinct mental attitude of imagining that p. This is a claim about the cognitive architecture that underlies the ability to imagine. It's intended as a claim that's empirically testable.

The argument rests on inference to the best explanation. A theory of imagination must explain certain features of imagination and how imaginings manifest themselves in pretense. And these features are best explained by positing a distinct propositional attitude.

Consider the following experiment:
> 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, quoted in Nichols and Stich, 2000, p. 117).

This highlights several features of imagination.
(i) Quarantining: we can imagine that p while believing that not-p and that we can imagine that p while believing that p. We manage to somehow "keep track" of what we believe and what we imagine.
(ii) Inference: inferential patterns of imaginings generally mirror those of beliefs.
(iii) Conceptual Naivete: imagining cannot require sophisticated psychological concepts. (Children don't pass the false belief test until they are 2.)

Nichols and Stich: imagining is a propositional attitude in addition to belief and desire. It warrants it's own "box" within diagrams of cognitive architecture. ("Possible World Box")

Some details about "boxology":
• Boxes signify that the representations grouped together have functional (not necessarily neurobiological) similarity.
• Propositional attitudes involve a relation between an attitude and a content. We can bear different attitudes to the same content.

• Boxes highlight ceteris paribus psychological laws that hold between different components of mind.

How does positing a PWB help explaining (i)-(iii)?

(i) Separate box explains how cognitive system keeps track of what we imagine and what we believe and desire. Also explains why we can imagine that p while believing that not p without any incoherence.

(ii) Process of inference goes on in PWB, drawing on the same mechanism that guides formation and revision of beliefs. Beliefs and imaginings are "written in the same code". Nichols & Stich posit additional mechanisms: "Updater" and "Script Elaborator".

How does imagining lead to action?

> "To pretend that p is (at least to a rough first approximation) to behave in a way that is similar to the way one would (or might) behave if p were the case. Thus, a person who wants to pretend that p wants to behave more or less as he would if p were the case" (p. 128).

So, the PWB gives rise to *beliefs* about what would be the case if p. These beliefs combine with the relevant desire to give rise to pretense.

This helps with (iii):

(iii) The subject does not need to have the concept of pretense in order to engage in pretense. Her mental attitudes that give rise to pretense do not make reference to mental concepts.

Proponents of DCA appeal to further phenomena: the phenomenon of affective responses to merely imagined and pretended scenarios and the co-presence of mindreading and pretense deficits in children with autism.

Reducing Imagination to Beliefs & Desires

Departing from orthodoxy, Langland-Hassan argues that No. He defends what he calls the Single Attitude of Imagination. In a nutshell, his view is that imaginings are just beliefs with a particular content: imagining that p is a matter of making judgments about what would likely happen if p, from retrieved beliefs in relevant generalization. In particular, when we imagine that p, we do not entertain the proposition that p.

Langland-Hassan suggests that we can make sense of the child's mental attitudes during the tea party as follows:

(P is perceptual attitude, B is belief, D is desire)

P1: You say, "Let's have a tea party!" and start setting out dishes and cups. You do all of this with a familiar cluster 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 in ways that would be appropriate if we were at a tea party, even if we're not at one.

D1: I play this game, too.

P2: You are acting as if[11] you are pouring tea out of the teapot and into the cups.

B2: (from D1 and P2) I should act as if 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 as if 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."

Note that the child does not any point need to actually entertain the proposition that the cup is empty.

It's complicated
Recently Schellenberg has argued that "it's complicated". She argues the belief and imaginings are on a continuum. Her argument relies on the phenomenon of imaginative immersion.

> If I am immersed in imagining that I am a talented wizard, I may start to take it to be true that I am a talented wizard. The distinctive cognitive role of the relevant representation is to some extent belief-like and to some extent imagination-like. If this is right, then imaginings and beliefs must be on a continuum. (508)

What Schellenberg takes to be the explanandum is that in cases of imaginative immersion, agents can slip from play-acting to total immersion and that it can be hard to tell (both from the inside and the outside) what state they are in. Are they still imagining or are they believing?

What is it to say that beliefs and imaginings are on a continuum?
> The particular way in which they are understood to be on a continuum depends on how beliefs and imaginings are understood. If they are identified relative to a cluster of functional roles, then the relevant continuum can be understood as follows: with a loss of roles characteristic of imagination and a gain of roles characteristic of belief, a person comes to have a state that is intermediate between the two. (509)

Thus, we should not posit two separate boxes for beliefs and imaginings, nor just a single belief box. Rather, we need to posit one box that includes the spectrum from belief to imagining.

Readings
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