

The Puzzle: Imagination can be a source of knowledge. But we also choose the content of our own imaginings – unlike in belief and perception, the content of what we imagine is in an important sense “up to us”.

How can we wish ourselves into knowledge?

Of course not all imaginings are chosen and not all of them guide actions. So the puzzle concerns only a subtype of imaginings: “Guiding Chosen” imaginings.

In paradigmatic cases of imagination, some internal cause leads to a sequence of mental states i_1, \dots, i_n .

In what sense does a person choose the i_1, \dots, i_n that constitute an imaginative episode? We can think of an imaginative episode on a par with a bodily movement; it's a mental action. It is chosen only when it's initiated by an intention. (Note: the intention need not be a self-standing intention to engage in that imaginative episode but can be part of another plan.)

To what extent are the contents of i_1, \dots, i_n determined by one's intention? Clearly, the initial imaginative state i_1 in the series must be chosen, and hence determined by one's intention. But if imagination is supposed to be epistemically useful, it cannot be that each subsequent state is guided by intention, too.

So what does the guiding? There must be a set of *constraints*. Given an initial, chosen, state these constraints determine (or help determine) how the imaginative episode (the sequence i_1, \dots, i_n) unfolds.

Propositional Imagination: Recall Nichols and Stich on the role of propositional imagination in guiding pretense. There's a possible world box that plays a distinct functional role. Propositions in the PWB develop exploiting various inference mechanisms. These inference mechanisms are the same as for beliefs. Once we have chosen our initial proposition in the PWB, the rest of the imaginative episode unfolds governed by the very same norms that govern ordinary inference.

Sensory Imagination: It's trickier to account for such constraints in the case of sensory imaginings. But we can draw on psychological literature concerning motor control in prediction. The hypothesis is that during ordinary perception cognitive systems “predict” the sort of sensory input that will be received, given their current state and the particular motor command initiated. The prediction is then compared to the input to determine whether there's a match. This allows the organism to distinguish between changes due to its own movement versus changes due to the environment.

The relevant cognitive system is called “forward model” and it's taken to encode learned perceptual regularities and contingencies.

Objection: this makes for rather tight constraints on both perceptual and sensory imagination. Even for action and inference guiding GC imaginings, there is never just one way that the imagining can unfold, given the way it begins. And some of our imaginings concern quite outlandish scenarios.

Response #1: Script Elaborator

Nichols and Stich posit the existence of a “Script Elaborator” that explains this. But the nature of the “Script Elaborator” is itself puzzling.

Response 2#: Cyclical Processing

Imaginings deviate from the patterns set out by lateral constraints, when we intentionally intervene in their processing. A single imaginative episode may include may “top down” interventions that insert additional premise or image.

We don't need to posit a distinct faculty of a “Script Elaborator”, the work is being done by our desires and intentions.

But we aren't always aware of intentions in our imaginative episodes! Sure, but neither am I aware of an intention to take out my keys when trying to unlock the door.

Imagination and its Limits

Philosophers often appeal to imaginative episodes in support for particular conclusions: thought experiments. Often these thought experiments involve outlandish scenarios: brain transplants, fission, etc.

Under which conditions can we expect the judgments that are generated by such imaginative scenarios reliable?

Gendler argues that this depends on the structure of the concept that the thought experiment is meant to elucidate. If a concept is structured around necessary and sufficient conditions and these conditions play a role in how we identify candidates as falling under the concept, the use of counterfactual scenarios is fine.

But, Gendler argues, it fails in cases where our concept is not structured in this way. In such cases, we may be aware that features that in actuality always co-occur can come apart. We can imagine scenarios in which they come apart in such way. But there is no ascertainable fact about how we would or should respond to these features in isolation. This is because we always make such evaluations by referring back to the original case and so our judgment will depend on framing effects.

Case in point: Bernard Williams discussion of Personal Identity Cases.

Gendler, Tamar Szabó (1998). Exceptional persons: On the limits of imaginary cases. *Journal of Consciousness Studies* 5 (5-6):592-610.

Langland-Hassan, Peter (2016). On Choosing What to Imagine. In A. Kind & P. Kung (eds.), *Knowledge Through Imagination*. Oxford University Press 61-84.