

Elijah Chudnoff, *Forming Impressions: Expertise in Perception and Intuition*. Oxford: Oxford University Press, 2021. xiv + 229 pp.

Thought experiments are a mainstay in philosophy. We think about how to apply philosophical concepts to hypothetical cases in an effort to draw conclusions about their application more generally. To take a familiar example, one way we might learn that justified true belief isn't knowledge involves first having an intuition that a subject has a justified true belief that doesn't rise to the level of knowledge in a hypothetical case (a so-called Gettier case).

About thirty years ago so-called "negative experimental philosophers" started to call this practice into question with the help of experimental results. According to them, we should distrust our intuitive verdicts about cases. Their reason: when we survey the folk, we find that variation in their intuitive verdicts about cases depends significantly on factors about their own psychology, which are irrelevant to the truth of the philosophical views at issue. They issued a challenge to explain why the intuitions philosophers rely on are any better off.

One line of response to the challenge invokes a "perceptualist" account of intuition, which conceives of intuition as a *sui generis* mental state that works a lot like perceptual experience except it is intellectual. Broadly speaking, the response goes, the challenge fails because beliefs about hypothetical cases are only justified when they are produced in the right way. The right way typically relies on "perception-like" intuitions. Moreover folk judgments about hypothetical cases tend not to be produced in the right way.

Elijah Chudnoff defends a new response of this kind in his latest book *Forming Impressions*. Crucial to his response is the claim that whether we are experts or not, we can have different, and indeed better, intuitions as we increasingly think about some issue. In the course of developing this response Chudnoff addresses a variety of issues, which span the psychology of expertise and modularity, the foundations of mathematics on the status of intuition, and early-modern rationalist thought on philosophical method.

The book has three parts. Part I provides a general theory of "expert impressions". Chudnoff divides expertise into expertise in forming impressions and expertise in performing actions. Among expertise in forming impressions, there is expertise in forming intuitions in addition to the more familiar expertise in forming perceptual experiences. Chudnoff argues for the superiority of classifying expertise according to this picture against other taxonomies found in psychology before going on to explore how closely expert intuitions resemble expert perceptual experiences. Part II explains the place of impressions in epistemology. Here Chudnoff argues against phenomenal conservatism, or the principle that any experience as of *p* provides the subject having the experience with prima facie justification for believing that *p*. Chudnoff defends presentational conservatism instead. Only experiences as of *p* that have a certain phenomenology—"presentational phenomenology"—provide the subject having the experience with prima facie justification for believing that *p*. Chudnoff builds his case by comparing the two views' treatments of experiences of occluded objects. The book culminates in a third and final part on philosophical methodology, which responds to the negative x-phi challenge.

The account of intuition in *Forming Impressions* departs from perceptualist orthodoxy in two important respects. Perceptualists tend to claim that intuitions are a source of *a priori*

justification. As a result, the judgments we make on their basis are *a priori* justified when justified at all. Chudnoff disagrees. In his account some intuitive judgments are *a posteriori*. What it takes for a judgment to count as intuitive is that it is formed by taking the contents of intuitions at face value. Moreover, when we take the contents of intuitions at face value, our perceptual experiences can sometimes play a substantial enough of a role in producing those intuitions that the resulting judgments are disqualified from counting as *a priori*. It may then turn out that many of the intuitive judgments arising from thought experiments in philosophy are *a posteriori*, *pace* standard rationalists (although it is worth noting that Chudnoff outlines a strategy for resisting this consequence—see especially 171-73).

Second, and more significantly for the methodological aims of this book, the account of intuition departs from the standard assumption that intuitions are pre-theoretic or naïve. Chudnoff instead claims that what one intuits can change, and indeed improve, as a result of reasoning with concepts featured in the content of the intuition. Chudnoff develops this idea by applying it to cases of mathematical and philosophical intuition.

In the philosophical case Chudnoff considers our intuitions about Thomson’s violinist.¹ Part of what generates our intuition (assuming we share it) that the patient is morally permitted to detach themselves from the violinist is the argumentation surrounding the description of the case itself. Without the surrounding argumentation, we may have the intuition that detachment is *not* morally permissible. More generally, Chudnoff highlights various practices in argumentation, which he thinks can modify the contents of our intuitions: “drawing distinctions, clarifying the meanings of terms, evaluating analogies, highlighting logical form, engaging in dialectic, articulating principles, exploring models, [and] considering extreme cases” (204). In this respect, Chudnoff suggests, argumentation is supposed to supplement intuition in a way similar to how microscopes and telescopes supplement visual experience in science: both fundamentally alter the content of our experiences.

There is a familiar concern for perceptualist accounts of intuitions like Chudnoff’s, which claim that intuitions have a special “presentational” phenomenology. Some struggle to locate experiences with such phenomenology, apart from perceptual experiences.² The point here is not to present this as a challenge for Chudnoff’s account (which, in fact, he has addressed elsewhere).³ Still, readers sympathetic to this concern may find it hard on occasion to evaluate Chudnoff’s account. I’ll sketch an example.

In Chudnoff’s view what we can see (or intuit) can change as we develop relevant expertise. At the same time there is a crucial respect in which the two kinds of impressions are said to differ. Expert perceptual experiences can have high-level contents, which their novice counterparts cannot. For example, when I start out birdwatching, my perceptual experiences can’t represent properties such as *being a superb fairywren*. I see it as having certain more basic properties and go on to infer that what I am observing is a superb fairywren. But this changes if I develop expertise in birdwatching. An expert can see a bird as a superb fairywren. So long as the birdwatcher is a novice, however, they won’t be able to see a bird as a superb fairywren (this is part of what makes them a novice birdwatcher).

Chudnoff then goes on to develop the intriguing proposal that intuitions do not resemble perceptual experiences in this respect. Instead, whatever contents can be accessed by an expert

¹ J. J. Thomson, “A defense of abortion”, *Philosophy and Public Affairs* 1 (1971): 47-66.

² Timothy Williamson, *The Philosophy of Philosophy* (Oxford: Blackwell), 217.

³ Elijah Chudnoff, *Intuition* (Oxford: Oxford University Press, 2013), Sect. 1.6.

can also be accessed by the novice. Chudnoff illustrates his view by way of a mathematical example: specifically, how we represent in intuition that there is a curve that can touch every point on a plane. This claim strikes us as counterintuitive at first; after all, we cannot visualize a curve of this kind. However, Chudnoff claims, a trained mathematician can intuit its truth; moreover so too can a beginner. An expert can show the beginner a series of constructions which increasingly approximate a space-filling curve so that they come to appreciate that the latter curve is possible after all. In the process the beginner is led to drop assumptions they made about curves initially (such as that all curves are visualizable). We reason our way to the intuition that there are space-filling curves.

At this stage in the dialectic we might pause and ask whether the beginner's guided judgment (or indeed the expert's) is based on an intuition. When you go along with someone's explanation for the existence of a space-filling curve, are you having an intuition in Chudnoff's sense? You haven't presumably had an intuition in the sense emphasized by dual-process theories in psychology; your judgment is not fast, automatic or pre-reflective. You have presumably undergone a complex process of reasoning assisted by the visualization of a series of curves, but this is not quite what we are looking for. Instead you are supposed to affirm that you experienced a mental state with the right phenomenology—with features like “pushiness” and “forcefulness” (79-80). Here some readers may balk.

Likely the book's view of intuitions and their place in philosophical practice will be most helpful to readers already drawn to a perceptualist account of intuition. Other readers can also expect to profit from engaging with it, beyond simply reaping the benefits of getting a better understanding of a possible view. Take an alternative approach to the epistemology of thought experiments that looks to the imagination. For example, we judge—and in some cases come to know—that it is morally permissible for the patient to detach themselves from the violinist—by imagining the scenario Thomson describes and asking what is true in it. Plausibly some of us are better at this task than others. They successfully stipulate the details explicitly mentioned in the description of the case and “fill in” further details appropriately. In fact recent work by Amy Kind explores the view that we can be more or less skilled at imagining in various contexts, including the context of thought experimentation.⁴ Parts of the rich framework developed in *Forming Impressions* may be reworked to suit an imagination-based view of thought experiments. Notably some of the central claims Chudnoff makes about intuition seem to carry over naturally to the imaginative exercises used in (philosophical) thought experimentation. Presumably we expect experts about a specific domain to be better at imagining scenarios about that domain. Trained philosophers could be a special case of this broader phenomenon. Moreover, the Chudnoff-style explanation of why philosophers are better at imagining Thomson's case is satisfying (even if it is ultimately only part of the story). Background beliefs—which can be acquired from considering arguments and using the sorts of argumentative tools Chudnoff emphasizes—can have an impact on how we imagine scenarios, whether they concern philosophical concepts or not. In which case Chudnoff's strategy may be of use to philosophers keen to defend the use of thought experiments in philosophy, regardless of any commitment to perceptualism about intuition.⁵

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⁴ See, e.g., Amy Kind, “The Skill of Imagination,” in *Routledge Handbook of Skill and Expertise*, ed. Ellen Fridland and Carlotta Pavese (London: Routledge, 2020), 335-46.

⁵ For helpful discussion, I am grateful to Nevin Climenhaga, Elijah Chudnoff and Beau Madison Mount.