The nature of intuitive justification

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Abstract In this paper I articulate and defend a view that I call phenomenal dogmatism about intuitive justification. It is dogmatic because it includes the thesis: if it intuitively seems to you that p, then you thereby have some prima facie justification for believing that p. It is phenomenalist because it includes the thesis: intuitions justify us in believing their contents in virtue of their phenomenology—and in particular their presentational phenomenology. I explore the nature of presentational phenomenology as it occurs perception, and I make a case for thinking that it is present in a wide variety of logical, mathematical, and philosophical intuitions.

Keywords Intuition · Epistemology · Phenomenology · Dogmatism · Justification

1 Introduction

By "intuitive justification" I mean justification that you possess for believing something because of an intuition that you have had. This stipulation is likely to raise at least three questions. (1) What are intuitions? (2) Do our intuitions really justify us in believing anything? (3) And if so, in virtue of what do our intuitions justify us in believing things?

My main target in this paper is question (3). By an account of the nature of intuitive justification I mean an account that says what it is in virtue of which our

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intuitions justify us in believing things. What I will argue is that our intuitions justify us in believing things in virtue of their phenomenology. For reasons I will explain below, I will call this view phenomenal dogmatism about intuitive justification.

While defending phenomenal dogmatism about intuitive justification is my main aim here, I will also take up a number of points that bear on questions (1) and (2). I will provide some *prima facie* motivation for thinking that the answer to (2) is positive. And my answer to question (3) should both strengthen and deepen the case for thinking that intuitions do justify us in believing things. I will also touch on question (1). In order to defend phenomenal dogmatism about intuition I will have to say something about what intuitions are, and specifically about what intuitions *feel* like.

The plan for the paper is this. In the next two sections I will focus on perceptual justification. I will develop a phenomenal dogmatist view about perceptual justification according to which perceptual experiences *prima facie* justify us in believing their contents, and do so in virtue of their phenomenology, and in particular their presentational phenomenology. In Sect. 4 I will argue that we should endorse phenomenal dogmatism about intuitive justification because intuition experiences also possess the relevant presentational phenomenology. In Sects. 5, 6, and 7 I will strengthen the argument for phenomenal dogmatism about intuitive justification by considering how it applies to intuitions of various kinds. In the last section I will locate the project pursued here with respect to some other issues that arise in thinking about intuition.

2 Perceptual justification

In this section I want to discuss dogmatism about perceptual justification. Here is a formulation of the view:

(DPJ) If it perceptually seems to you that p, then you thereby possess some *prima facie* justification for believing that p.

The literature contains a number of helpful discussions of DPJ, but it will be useful to set out three important clarifications here.¹

First, "it perceptually seems to you that p" should be understood so that it perceptually seems to you that p just in case you have a perceptual experience part of whose representational content is that p. Suppose you have a perceptual experience that inclines you to believe that p. Then in some sense it seems to you that p, and it does so because of your perceptual experience. But still it might not perceptually seem to you that p: your perceptual experience itself might not represent that p. Suppose you have a perceptual experience that represents that p,

¹ See in particular Huemer (2001) and Pryor (2004). Huemer defends a more comprehensive view that he calls phenomenal conservatism: (PC) If it seems to S that P, then S thereby has at least *prima facie* justification for believing that P (Huemer 2001, p. 99). DPJ is equivalent to phenomenal conservatism restricted to perceptual seemings.



but that you are not inclined to believe that p. Then, again, in *some* sense it does not seem to you that p, and your perceptual experience doesn't change that. But still it does *perceptually* seem to you that p: your perceptual experience does represent that p.

Second, the significance of the "thereby" is this: the justification DPJ says you possess when it perceptually seems to you that p depends on your perceptual experience *alone*. Your perceptual experience itself suffices to give you that justification. You need not possess background beliefs about your perceptual experience in order to have this bit of justification. Of course, you might have some other justification for believing that p, which does depends on things other than your perceptual experience, but DPJ is silent about this other justification.

Third, the justification that DPJ says you possess when it perceptually seems to you that p is "prima facie." What this means is that it can be defeated or undermined. If it perceptually seems to you that p, but you have good reason to believe that not-p, then all things considered you might not be justified in believing that p. This is compatible with DPJ. Similarly, if it perceptually seems to you that p, but you have good reason to think that your perceptual experience is untrustworthy, then all things considered you might not be justified in believing that p. This too is compatible with DPJ.

So much for what dogmatism about perceptual justification is. Let me now distinguish two questions one might ask about DPJ:

- (1) Why think that DPJ is true?
- (2) Supposing DPJ is true, in virtue of what is it true?

Questions (1) and (2) are distinct. Question (1) asks for reasons to think that DPJ is true. These reasons for thinking DPJ is true need not shed light on *why* it is true—though they might. Question (2) asks for an account of what it is that explains why DPJ is true. An answer to question (2) need not satisfy the dialectical conditions on being a good reason to think that DPJ is true—for example it need not be non-question-begging. My main aim here is to take up question (2). But let me review some of the answers that have been given to question (1).

One reason to believe DPJ is that it just seems plausible on initial reflection. I know that my bicycle is red. How? I can see that it is. When I look at my bicycle, I have a visual experience that represents it as being red. This visual experience justifies me in thinking that my bicycle is red. And, on the face of it, it justifies me in thinking that my bicycle is red all on its own—without any epistemic support from background beliefs or additional experiences.

Another reason to believe DPJ is that it contains the resources to meet the most natural worries one might have about it—so that its initial plausibility isn't diminished by further reflection. Pryor and Huemer have addressed many potential worries about DPJ.² Instead of reproducing their efforts, let me consider a recent worry that Peter Markie has developed.³ He describes the following case:



² See Huemer (2001) and Pryor (2004).

³ See Markie (2005).

Suppose we are prospecting for gold. You have learned to identify a gold nugget on sight but I have no such knowledge. As the water washes out of my pan, we both look at a pebble, which is in fact a gold nugget. My desire to discover gold makes it seem to me as if the pebble is gold; your learned identification skills make it seem to you that way.

Markie's worry is that DPJ entails that both observers possess *prima facie* justification for believing that the pebble is gold, but in fact only the observer with the learned identification skills does.

Markie's example is underspecified. Does Markie's desire to discover gold make it seem to him that the pebble is gold because (A) he has a perceptual experience whose representational content is neutral with respect to whether the nugget is gold, but which—because of his desire—he interprets as being of some gold, or (B) he has a perceptual experience whose representational content—because of his desire—is in part that the nugget is gold. If (A), then Markie's belief might not possess prima facie justification, but DPJ does not entail that it does. If (B), then there are two options that proponents of DPJ might pursue. The first is to agree that DPJ entails that Markie's belief has *prima facie* justification, and to argue that this is the correct result. If Markie becomes aware of the role his desire is playing in causing his perceptual experience, then his prima facie justification will be undermined—and DPJ accommodates this possibility. But so long as Markie remains unaware of the role his desire is playing, then, according to this first option, he does possess some prima facie justification for thinking that the pebble is gold. The second option is to argue that the proper scope of DPJ is restricted so that it does not entail that Markie's belief has *prima facie* justification. Pryor, for example, argues that there is a class of "perceptually basic" propositions that our perceptual experiences "basically represent," and that DPJ should range only over these propositions.⁴ Perhaps, then, Markie's perceptual experience does represent that the nugget is gold, but it does not basically represent that the nugget is gold. Both options seem workable to me. The second, however, requires a more principled understanding of the difference between basic perceptual representation and non-basic perceptual representation. I will develop such an understanding below.

One last reason to believe DPJ is that it provides the basis for a modest response to skepticism about our knowledge of the external world. Both Pryor and Huemer develop this reason in more detail.⁵ Here I just mention it as one of the considerations that render DPJ attractive.

Assuming, then, that DPJ is true, what is it about perceptual experience that explains why it is true?

While there are a number of answers that one might give to this question, I want to consider just two. The first is a reliabilist answer, and the second is a phenomenalist answer.

(Reliabilism) DPJ is true because perceptual experiences are reliable.

⁵ Again, see, Huemer (2001) and Pryor (2004).



⁴ See Pryor (2004).

According to Reliabilism, if it perceptually seems to you that p, then you thereby have some *prima facie* justification for believing that p because: generally, it perceptually seems to you that p only if p. Goldman does not endorse DPJ: he finds Markie's worry compelling. But he does develop an account of why in *some* cases, if it perceptually seems to you that p, then you thereby have some *prima facie* justification for believing that p, and his account bears a family resemblance to Reliabilism. A natural proponent of Reliabilism would be someone with Goldman's reliabilist sympathies who was not moved by Markie's or other worries about DPJ.

I lack Goldman's reliabilist sympathies. This is not the place, however, to take up arguments for and against reliabilism, or epistemic externalism more generally. In this paper I will assume that the following phenomenalist view is the correct view about what it is in virtue of which DPJ is true:

(Phenomenalism) DPJ is true because perceptual experiences have a certain phenomenal character.

Pryor endorses a version of Phenomenalism. According to him "there's a distinctive phenomenology: the feeling of seeming to ascertain that a given proposition is true" and it is because perceptual experiences have this phenomenology that they *prima facie* justify us in believing what they represent.⁷

I think that Pryor's account is correct so far as it goes, but that it does not go far enough. We need a fuller account of the nature of the phenomenology that perceptual experiences possess and in virtue of which DPJ is true of them. There are at least four reasons why. First, a fuller understanding of the relevant phenomenology will provide us with a basis for exploring whether other kinds of experience—in particular intuition experiences—possess it. Second, a fuller understanding of the relevant phenomenology will help to prevent confusion: one major source of resistance to Phenomenalism is confusion of the relevant phenomenology with other, irrelevant phenomenology. Third, a fuller understanding of the relevant phenomenology—at least as I will develop it—will also provide a deeper understanding of the distinction between those propositions that a perceptual experience basically represents and those propositions that a perceptual experience non-basically represents. Fourth, a fuller understanding of the relevant phenomenology will strengthen the cases for both DPJ and Phenomenalism: once we better appreciate what phenomenology it is in virtue of which perceptual experiences are supposed to give us prima facie justification, that they do so and that they do so in virtue of their phenomenology will seem more compelling.

3 Phenomenology and justification

The aims of this section are to pick out and describe a kind of phenomenology, and to make it plausible that this kind of phenomenology can explain the epistemic



⁶ See Goldman (2008).

⁷ See Pryor (2000, 2004).

powers of perceptual experience. I will call the kind of phenomenology presentational phenomenology.

The descriptive thesis that I will defend is that what it is for a perceptual experience to have presentational phenomenology is for it to have two other kinds of phenomenal property that are appropriately correlated. What I must do, then, is introduce these two other kinds of phenomenal property. The best way to introduce them, however, is by first introducing two kinds of non-phenomenal property, and this is how I will begin.

The two kinds of non-phenomenal property are properties of being sensorily item-aware of an item and properties of fact-perceiving that something is the case. This distinction generalizes a distinction between two kinds of visual property—properties of seeing-x and the properties of seeing-that-p. Contrast the following two perceptual reports:

- Albert sees the rocket.
- (2) Albert sees that the rocket has launched.

These perceptual reports attribute two different properties to Albert. (1) Attributes the property of seeing the rocket, and (2) attributes the property of seeing that the rocket has launched. These are different properties because Albert might see the rocket but fail to see that it has launched, and Albert might see that the rocket has launched but fail to see the rocket—because, say, it is hidden by its exhaust cloud. This example illustrates the difference between being visually itemaware of an item—in this case a rocket—and visually fact-perceiving that something is the case—in this case that the rocket has launched. The distinction between being sensorily item-aware of an item and fact-perceiving that something is the case generalizes this distinction to other sensory modalities.

Properties of being sensorily item-aware of an item and fact-perceiving that something is the case are non-phenomenal properties. The reason why is that it is not sufficient to have one of these properties that you have an experience with a certain phenomenal character. In order to be visually item-aware of a rocket, for example, there must exist a rocket and you must stand in some relation to it. Further, in order to visually fact-perceive that the rocket has launched, it must be true that the rocket has launched and you must stand in some relation to this truth. So being sensorily item-aware of an item and fact-perceiving that something is the case are properties whose instantiation depends on the satisfaction of non-phenomenal conditions, such as the existence of rockets and the truth of propositions about rockets. That is why they are non-phenomenal properties.

Even though they are non-phenomenal properties, in instantiating them we do instantiate phenomenal properties. In being visually item-aware of a rocket, for example, you have a visual experience and this experience has a phenomenal character. There are many different visual experiences with different phenomenal characters that one might have in being visually item-aware of a rocket: the rocket

⁸ Classic discussions of the distinction between item-awareness and fact-perception include Chisholm (1957), Warnock (1965) and Dretske (1969); for more recent discussion see Dretske (1995) and Johnston (2006).



might look different ways, and perhaps not even look like a rocket at all—it might just look like a far off speck on the horizon. In some cases, then, while you are visually item-aware of a rocket, you do not seem to be, or feel as if you are, visually item-aware of a rocket. In other cases, however, you are visually item-aware of a rocket, and you also seem to be, or feel as if you are, visually item-aware of a rocket. Take this phenomenal property: seeming to be visually item-aware of a rocket. This is an instance of a general kind of visual phenomenal property: seeming to be visually item-aware of an item. And there is an even more general kind of sensory phenomenal property: seeming to be sensorily item-aware of an item.

Properties of the kind, seeming to be sensorily item-aware of an item, are phenomenal properties because in order to instantiate them all you have to do is have an experience with the right phenomenal character. You might, for example, seem to be visually item-aware of a rocket just by having a visual experience with a certain phenomenal character, even if there is no rocket around for you to genuinely see. Properties of seeming to be sensorily item-aware of an item are one of the two kinds of phenomenal property that I believe are necessary for a perceptual experience to have presentational phenomenology.

The other kind of phenomenal property is that of *seeming to fact-perceive that something is the case*. The property of seeming to fact-perceive that p is identical to the property of having a perceptual experience representing that p, or the property of having it perceptually seem to you that p. A visual example is the property of seeming to visually fact-perceive that the rocket has launched—i.e. the property of having a visual experience representing that the rocket has launched. This property is a phenomenal property: all you have to do is have a visual experience with a certain phenomenal character in order to have it; it need not be the case that there is a rocket that has in fact launched.⁹

To fix ideas, contrast the following two perceptual reports:

- (1) Albert seems to be visually item-aware of a rocket.
- (2) Albert seems to fact-perceive that the rocket has launched.

These perceptual reports attribute different properties. Albert might seem to be visually item-aware of a rocket without seeming to fact-perceive that the rocket has launched. Further, Albert might seem to fact-perceive that the rocket has launched without seeming to be visually item-aware of a rocket—because, say, he only seems to be visually item-aware of its exhaust cloud. Perhaps there is some deep analysis of properties of seeming to be sensorily item-aware of an item in terms of properties of seeming to fact-perceive that something is the case, or vice versa. I will neither assume that there is, nor assume that there isn't. My aim is to explore some of the

⁹ I am assuming that the phenomenal character of a visual experience can fix at least some of its intentional content, i.e., that there is such as thing as phenomenal intentionality. For some defenses of phenomenal intentionality see: Siewert (1998), Loar (2003), Horgan and Tiensen (2002), and Chalmers (2002). For the purposes of this paper the assumption that there is phenomenal intentionality plays a simplifying role: it is possible to relax it at the cost of added complexity. For example, without the assumption of phenomenal intentionality, I would have to reformulate the footnoted sentence thus: all you have to do is have a visual experience with a certain phenomenal character and intentional content in order to have it: it need not be the case that there is a rocket that has in fact launched.



ways these two sorts of property come together in perceptual experiences that do not presuppose either their identity or their distinctness.

One such connection is this: it is impossible to seem to fact-perceive that something is the case without seeming to be sensorily item-aware of some items in your environment. All perceptual experiences involve seeming sensory item-awareness. The connection between seeming fact-perception and seeming sensory item-awareness runs deeper than this, however.

Suppose you seem to fact-perceive that your friend is smiling. In this experience you will also seem to be sensorily item-aware of some items in your environment. Suppose one of these items is your friend's smile. In this case you have an experience in which you seem to fact-perceive that p—that your friend is smiling—and in which you seem to be sensorily item aware of an item—your friend's smile—that makes it the case that p. The item—the smile—that you seem to be aware of makes true the proposition—that your friend is smiling—that you seem to perceive to be the case. ¹⁰ Presentational phenomenology just is this correlation between two kinds of phenomenal property: a perceptual experience possesses presentational phenomenology when in it you both seem to fact-perceive that p and seem to be sensorily item-aware of an item that makes it the case that p.

While it is plausible that all perceptual experiences possess some presentational phenomenology, it is not plausible that every perceptual experience possesses presentational phenomenology with respect to every proposition you seem to fact-perceive to be the case in it. Suppose—continuing with the same experience—you seem to fact-perceive that your friend is happy. Because you seem to be visually item-aware of your friend's smile, you seem to be aware of an item that counts as *evidence* that your friend is happy, but this is quite different from seeming to be aware of an item that *makes it the case that*—that is a truth-maker for the proposition that—your friend is happy. Here, then, we have a proposition—the proposition that your friend is happy—with respect to which your experience does not possess presentational phenomenology, even though there is another proposition—that your friend is smiling—with respect to which it does possess presentational phenomenology.

Now that I've said what presentational phenomenology is, I want to consider what role it might play in a phenomenal dogmatist view of perceptual justification. Specifically, I want to assess the following thesis:

(Presentationalism_P) DPJ is true because perceptual experiences have presentational phenomenology.

¹¹ I should point out that the claim that all perceptual experiences possess some presentational phenomenology is compatible with what Adam Pautz argues in Pautz (2007): Pautz argues against the metaphysical claim that all perceptual experiences involve item-awareness; I am endorsing the phenomenological claim that all perceptual experiences involve seeming item-awareness.



¹⁰ Suppose you are hallucinating: there is no smiling friend before you. In this case there is no smile that makes true the proposition that your friend is smiling. Still, you seem to see an item—a smile—that *can make true*, *or is of the sort to make true* the proposition—that your friend is smiling—that you seem to perceive to be the case. I will generally ignore such niceties in the interests of readability.

I will count Presentationalism_P a success if it fulfills the motivations for pursuing a fuller understanding of the phenomenology that perceptual experiences possess and in virtue of which DPJ is true of them, which I set out toward the end of the last section.

The first motivation was to have a basis for exploring whether other kinds of experience—in particular intuition experiences—possess the relevant kind of phenomenology. The account of presentational phenomenology that I have developed provides such a basis. Intuition experiences possess presentational phenomenology just in case they are experiences in which we both represent that p, say, and seem to be aware of an item that makes it the case that p. In the next section I will explore whether this is what intuition experiences are like.

The second motivation was to prevent confusion. This is particularly important in the case of intuition experiences. A phenomenal dogmatist about intuitive justification shouldn't say that you are *prima facie* justified in believing whatever proposition pops into mind. The view should be more discriminating about how you must represent a proposition. Requiring that you represent it in an experience with presentational phenomenology renders the view appropriately discriminating.

The third motivation was to illuminate the distinction between propositions that are basically represented in a perceptual experience. I believe that this distinction should be identified with the distinction between propositions with respect to which a perceptual experience has presentational phenomenology and propositions with respect to which a perceptual experience lacks presentational phenomenology. This identification provides a setting within which to fill out the second of the two replies to Markie's worry about DPJ. This reply is that Markie is correct to think that one needs some justification for background beliefs about the look of gold, or what Markie calls "learned identification skills," in order to tell by sight whether a nugget is gold, but that this does not refute DPJ because our visual representation of a nugget as being gold is non-basic. Now we can add: it is non-basic because we are not, and do not even seem to be, visually item-aware of the hidden molecular structure in virtue of which the nugget is gold.

I have remained neutral about whether dogmatists should adopt this line of response to Markie's worry. Whether to adopt it is bound up with a more general question facing proponents of Presentationalism_P. This is the question of whether to endorse unrestricted DPJ—as does Huemer—or restricted DPJ^R—as does Pryor:

(DPJ^R) If it *basically* perceptually seems to you that p, then you thereby have some *prima facie* justification for believing that p.

Presentationalism_P is compatible with both DPJ and DPJ^R. The fan of DPJ might argue that because perceptual experiences have presentational phenomenology with respect to *some* of their propositional content, they *prima facie* justify believing *all* of their propositional content. The fan of DPJ^R might argue that if it is the presentational phenomenology of perceptual experiences that explains why they give *prima facie* justification, then they only give *prima facie* justification for believing those propositions with respect to which they have presentational phenomenology. The debate here is about what propositions a perceptual experience



prima facie justifies on its own—without the help of other justification or Markie's "learned identification skills." Someone who accepts DPJR can agree that your visual experience representing something as a nugget of gold prima facie justifies you in believing that it is a nugget of gold, but—assuming you are not visually itemaware of what makes it the case that it is a nugget of gold—they must argue that your visual experience prima facie justifies your belief in part because of justification you have for beliefs about what gold looks like, or because of "learned identification skills." It is not obvious which view to adopt. I think it depends on the overall theoretical setting for understanding our knowledge of the external world each view provides. This is a topic well beyond the scope of my present inquiry, and so here I will remain neutral.

The fourth motivation for pursing the phenomenological investigations of the present section was to bolster the initial attraction of DPJ. Presentationalism_P seems to me to do this: I find it compelling that if you have an experience that not only represents your environment as being a certain way, but that is one in which you also seem to be aware of the very items in your environment in virtue of which it is the case that your environment is that way, then you thereby have some *prima facie* justification for believing that your environment is the way it appears to you to be.

4 Intuitive justification

Dogmatism about intuitive justification is the following view:

(DIJ) If it intuitively seems to you that p, then you thereby possess some *prima facie* justification for believing that p.

DIJ, like DPJ, is plausible on initial reflection. Suppose Albert considers the proposition: every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. It neither seems true nor seems false to him, and he neither has justification for believing it nor has justification for doubting it. Suppose Albert reflects on the matter. What he does is he illustrates the relevant kind of mapping from concave to convex figures to himself by imagining a concrete example:



Imagining such a concrete example gives Albert an improved grip on what the proposition is about, and in light of this improved grip it now seems to him to be true. It does not perceptually seem to him to be true. Rather, it intuitively seems to him to be true: he has an intuition experience whose representational content is that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. Further, Albert now has some *prima facie* justification for believing that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. On the face of it, he now has this *prima*



facie justification for believing the proposition precisely *because* it now intuitively seems true to him. Examples similar to this one can be multiplied. They render DIJ plausible in just the way that analogous examples render DPJ plausible.

In virtue of what is DIJ true of intuition experiences? The answer that I will defend is that DIJ is true because intuition experiences have a certain phenomenology, and in particular because intuition experiences have presentational phenomenology:

(Presentationalism $_{\rm I}$) DIJ is true because intuition experiences have presentational phenomenology.

Just as with the presentational phenomenology of perceptual experiences, the presentational phenomenology of intuition experiences is a correlation between two kinds of phenomenal property: an intuition experience possesses presentational phenomenology when in it you both seem to fact-*intuit* that p and seem to be *intellectually* item-aware of an item that makes it the case that p. The structure of the presentational phenomenology is the same. What differs in intuition experiences is that the seeming is intuitive, not perceptual, and the awareness is intellectual, not sensory.

The two main tasks that arise in defending Presentationalism $_{\rm I}$ are showing that intuition experiences possess presentational phenomenology and showing that their presentational phenomenology can explain why DIJ is true of them. Further reflection on Albert should help in pursing both tasks.

Albert's intuition experience is an experience in which it seems to him that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. He does not seem to perceive, remember, receive testimony, or infer that this proposition is true. Rather, he seems to intuit that it is. The main line of resistance to the claim that Albert's intuition experience is an experience in which a proposition intuitively seems to him to be true derives from views according to which intuitions are just conscious beliefs or conscious inclinations to believe. I think that these views are mistaken. The main motivation for them that their proponents have given is that when they peek into their streams of consciousness while having an intuition they do not find anything other than a conscious belief or a conscious inclination to believe. 12 I have criticized this line of argument elsewhere. 13 In this paper, however, I will be more concessive. Suppose intuition experiences are experiences in which you consciously believe or are consciously inclined to believe a proposition. Still, such experiences might possess presentational phenomenology: they will if they are also experiences in which you seem to be aware of an item in virtue of which the proposition you believe or are inclined to believe is true. I will continue to talk about intuitive seemings; but what I say should be translatable into talk about conscious beliefs or conscious inclinations to believe.

If Albert's experience has presentational phenomenology, then it must be an experience in which he seems to be aware of an item in virtue of which every



See, for example, Williamson (2008, p. 217).

¹³ Chudnoff (unpublished a).

concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. First, what item might that be? A plausible candidate is a manymany mapping from concave figures to convex figures that associates each concave figure with those convex figures that bound a greater area in a smaller perimeter. I will assume that something *like* this item is a truth-maker for the proposition Albert seems to intuit. Second, what in the story suggests that Albert seems to be aware of this item? The part of the story that suggests this is the part where Albert seems to gain an improved grip on what the proposition he is considering is about. This is not a semantic achievement: it is not as if he now grasps a proposition that he did not grasp before, as the relevant proposition is already the content of one of his propositional attitudes, his attitude of entertaining it. The achievement is more substantive: what he now grasps better than he did before is the *subject matter* of the proposition he is considering; he makes the items it is about and on which its truth hinges present to mind. Third, and finally, in what does Albert's seeming itemawareness of the mapping that is a truth-maker for the proposition he seems to intuit consist? It consists in his imaginative endeavor. He imagines rounding out a concave figure into a convex figure that bounds a greater area in a smaller perimeter. In the context of his overall experience of reflecting on the proposition that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter, however, this imaginative endeavor amounts to more than merely imagining one such transformation. His imaginative endeavor presents him with an instance recognized as an instance of a type, and it thereby assumes a greater import: in it, Albert does not just idly play around with figures in his mind's eye; rather, in it, Albert renders an infinite, abstract mapping present to mind by visualizing a partial, concrete realization of it. 14

The forgoing reflections on Albert support the claim that his intuition experience has presentational phenomenology.¹⁵ What further considerations support thinking that this presentational phenomenology explains why his experience gives him some *prima facie* justification?

One consideration is an analogy with perception. The presentational phenomenology of perceptual experiences explains why they *prima facie* justify believing their contents. Albert's intuition experience *prima facie* justifies him in believing its content, and it has presentational phenomenology. So, arguing by analogy, its presentational phenomenology should be able to explain why it *prima facie* justifies Albert' in believing its content. The claim that Albert's intuition experience *prima facie* justifies him in believing its content in virtue of its presentational phenomenology is not just attractive because it is similar to analogous claims

¹⁵ The idea that intuitions involve both item- and fact-presentation—presentational phenomenology in the sense that I have articulated—can be found in: Gödel (1947), Husserl (1975), Parsons (1980, 2007), Russell (1992), and Tieszen (1989) among others in the rationalist, Kantian, early analytic, and phenomenological traditions.



¹⁴ Here I am aligning myself with the universal-in-the-particular tradition, according to which it is possible to be aware of a universal by being aware of a particular. See, for example, Kant (1999) on the construction of mathematical objects in pure intuition, Parson's (1980, 2005, 2007) elaboration of Kant's view, Husserl (1975) on the grasping of essences though imaginative variation, and Tieszen's (1989, 2005) elaboration of Husserl's view. The claim I am making here is relatively modest since my claim is a phenomenological claim about seeming awareness, not a metaphysical claim about genuine awareness.

about perceptual experiences. It is also attractive on its own. Just focusing on the phenomenology of Albert's experience, I find it plausible that an experience that feels like *that* should *prima facie* justify one in believing what it presents as being true.

So far I've been focusing on Albert's experience. The considerations reviewed support thinking that *his* intuition experience possesses presentational phenomenology and that *its* presentational phenomenology explains why Albert gains *prima facie* justification for believing its content. One might worry, however, that Albert's intuition experience is special in ways that render reflection on it unlikely to illuminate the phenomenology and epistemology of intuition experiences more generally. In the next few sections I want to strengthen the case for Presentationalism_I by exploring intuitions that differ from Albert's in various ways.

5 Imagination, reflection, and inference

One worry is that the example I have been discussing is a special case because it is a case of geometrical intuition and involves the use of visual imagery. This worry can be met by presenting a case that is not a case of geometrical intuition and that does not involve the use of visual imagery. Suppose Albert considers the proposition: the bigger of two numbers is the average of their sum and difference—max (m, n) = [(m + n) + |m - n|]/2. It neither seems true nor seems false to him, and he neither has justification for believing it nor has justification for doubting it. So he reflects on the matter. Here is a bit of interior monologue: (m + n) is the bigger number plus the smaller number, and |m - n| is the difference by which the smaller number falls short of the bigger number, so (m + n) + |m - n| is twice the bigger number, and halving that gives you the bigger number; clearly then max (m, n) = [(m + n) + |m - n|]/2—the bigger of two numbers is the average of their sum and difference.

That is the story. Now here is some commentary, which I will defend below. In this example Albert comes to have an intuition experience representing that the bigger of two numbers is the average of their sum and difference. This is an algebraic truth about numbers, not a geometrical truth about shapes, and the reflections whereby he comes to appreciate it do not involve the use of visual imagery. Albert's intuition experience possesses presentational phenomenology. He seems to be aware of an item—the arithmetical operation of averaging the sum of and difference between two numbers. In this example his seeming awareness does not consist in an imaginative endeavor. Rather, it consists in a cognitive endeavor—his making clearer to himself in stages just what it is to average the sum of and difference between two numbers. Further, Albert's intuition experience *prima facie* justifies him in believing that the bigger of two number is the average of their sum and difference, and it does so because it is an experience in which he seems to be aware of the very item, the arithmetical operation, in virtue of which this proposition is true.

According to my commentary the phenomenal structure of Albert's intuition experience representing that the bigger of two numbers is the average of their sum



and difference is similar to that of his intuition experience representing that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. There is, however, a worry. The worry is that Albert does not have an intuition experience representing that the bigger of two number is the average of their sum and difference, but, rather, simply *infers* that this is so from some premises that his reflections bring to light. This is an important worry, and in the balance of this section I will sketch a response to it.

There are two competing theses about Albert: (1) He has an intuition experience: (2) He makes a conscious inference. In order to adjudicate between them, we require an understanding of the difference between intuition and inference. One difference might be epistemic: one's intuitively justified beliefs have immediate justification that is independent of one's justification for other beliefs, and one's inferentially justified beliefs have mediate justification that is dependent on one's justification for other beliefs. This is, perhaps, a difference, but even if it is, it will not help to adjudicate between theses (1) and (2). ¹⁶ This is because it is no easier to adjudicate between thesis (3) Albert's justification is immediate and thesis (4) Albert's justification is mediate than it is to adjudicate between thesis (1) and thesis (2).¹⁷ There is, however, a more helpful difference. There is a phenomenal difference between intuition experiences and conscious inferences. It might seem obvious what that difference is: intuition experiences just involve representing one proposition, and conscious inferences involve representing many propositions. ¹⁸ But I think that this is mistaken. Both intuition experiences and conscious inferences can be grounded in reflections that involve representing many different propositions. The difference between them is in the nature of those reflections.

There are at least two kinds of reflection on a proposition p: one kind brings to light propositions that are distinct from p and that lend p some support; the other kind brings to light the items that p is about and on which the truth of p hinges. If it seems true to you that p because of reflections of the first kind, then it seems true to you that p because of your appreciation of the force of an argument, and you have made a conscious inference. If it seems true to you that p because of reflections of the second kind, then it seems true to you that p because of your awareness of a truth-maker for p, and you have had an intuition experience. It is not always obvious from a *description* of some bit of reflection which kind it is. But there is a felt difference between the two kinds of reflection, which is manifest from a first person perspective. This felt difference is just the difference between an experience that possesses and an experience that lacks presentational phenomenology. That is, the phenomenal difference between intuitions and inferences consists in this: intuitions

¹⁸ Cf. Descartes's (1985) discussion of intuition and demonstration in the *Rules*.



¹⁶ I add "perhaps" for reasons that emerge below, in the Sect. 7. Just as theoretical considerations might favor thinking some perceptual justification is mediate, similar theoretical considerations might favor thinking some intuitive justification is mediate.

 $^{^{17}}$ Arguing that Albert has justification for thinking the bigger of two numbers is the average of their sum and difference only if he has justification for believing that lm - nl is the difference by which the smaller number falls short of the bigger number, say, does not settle the matter. The reason why is that Albert might have one common justification—his awareness of the arithmetical operation—that justifies believing both claims, if it justifies either.

have presentational phenomenology, and inferences lack presentational phenomenology. ¹⁹ My claim about Albert is that if you imagine yourself in his shoes, you will find that the reflections he engages in do not merely turn up premises from which he concludes that the bigger of two numbers is the average of their sum and difference, but, rather, force this proposition on him as being true by rendering the abstract subject matter that makes it true present to his mind. ²⁰ This is what makes his experience an intuition experience, not a conscious inference.

Given these considerations and the absence of a compelling argument that Albert's experience is really a case of conscious inference, not intuition, I think it is reasonable to accept my initial commentary. And that should deflect the worry that the account of intuitive justification proposed in the last section only applies to geometrical intuitions that involve visual imagery.

6 Unreflective intuitions

Both examples I have discussed are examples in which Albert begins by neither seeming to intuit that a proposition is true nor seeming to intuit that it is false. In order to have an intuition experience Albert must reflect, and it is the reflections that he engages in that both make the proposition intuitively apparent and give him a sense of being aware of an item that makes the proposition true. But some propositions are immediately intuitively obvious: you do not have to reflect in order to have an experience in which such a proposition intuitively seem to you to be true. Call these unreflective intuition experiences. Here are some propositions one might unreflectively intuit: if 2 > 1, then 2 > 1; 2 > 1. Here, now, is a worry. When we have an intuition experience whose content is one of these propositions it gives us *prima facie* justification for believing it. But our intuition experience seems too minimal to have presentational phenomenology. If it does not have presentational phenomenology, then something else must account for its epistemic properties. And if there is something else in this sort of case, then that suggests there is something else in other cases, casting doubt on Presentationalism_I.

First, take the proposition that if 2 > 1, then 2 > 1. You need not engage in reflections aimed at making the > relation, 1, or 2 present to mind in order to tell by intuition that if 2 > 1, then 2 > 1. All you have to do is entertain the proposition and hold it in mind—whereupon it will intuitively strike you as being true. Still, I claim, your intuition experience has presentational phenomenology. What item do you seem to be intellectually aware of? Plausibly, it is the proposition itself, or one of its intrinsic properties such as its form. While propositions are the contents of seeming fact-intuition, they can also be the objects of seeming intellectual item-awareness. Merely entertaining or holding in mind the proposition that if 2 > 1, then 2 > 1 is not enough to make you aware of the > relation, 1, or 2; it is enough, however, to make you aware of the proposition that if 2 > 1, then 2 > 1 itself, or one of its

The phrase "force this proposition on him as being true" derives from Gödel.



¹⁹ I elaborate on these claims and explore the difference between intuition and inference further in Chudnoff (unpublished b).

intrinsic properties such as its form. And because the proposition that if 2 > 1, then 2 > 1 is a logical truth, it is plausible that it or its form is a truth-maker for itself. For one type of unreflective intuition, then: you merely entertain and hold in mind the proposition that p, and this is enough to have an intuition experience possessing presentational phenomenology with respect to p because you seem to be item-aware of the proposition that p itself, or one of its intrinsic properties, such as its form. 22

Second, take the proposition that 2 > 1. I will assume that this proposition is made true by some state of affairs involving 1, 2, and the > relation—not by itself or one of its intrinsic properties, such as its form. Merely entertaining and holding in mind the proposition that 2 > 1 will not make you intellectually item-aware of the numbers 1 or 2, or the > relation. Still, however, all most of us need to in order to have an intuition experience presenting the proposition that 2 > 1 as true is to entertain and hold it in mind. The reason why, I suggest, is that most of us are already intellectually item-aware of the numbers 1 and 2, and the > relation, and when we consider the proposition that 2 > 1 our pre-existing item-awareness of these items renders it intuitively obvious. There are a few points connected with this suggestion that require spelling out.

First, just as there is a distinction between item-awareness and fact-perception, or item-awareness and fact-intuition, there is a distinction between item-recollection and fact-recollection. Contrast the following reports:

- (1) Albert recalls the rocket.
- (2) Albert recalls that the rocket has launched.

(1) Does not entail (2): Albert might recall the rocket, without recalling that it has launched. And (2) does not entail (1): Albert might recall that the rocket has launched—he might summon up this bit of knowledge—but fail to recall the rocket—he might not be able to summon up the rocket itself, and bring it before his mind's eye. There is, again similar to the cases of perception and intuition, also distinction between seeming item-recollection—which one might experience in the absence of genuine past awareness—and seeming fact-recollection—which one might experience in the absence of genuine stored knowledge.

Second, just as you might seem to recall a concrete item on the basis of retained—or seemingly retained—past sensory item-awareness of it, you might seem to recall an abstract item on the basis of retained—or seemingly retained—past intellectual item-awareness of it. There is no reason to think that the scope of what items we can recollect—or seem to recollect—is limited to those items that we have sensed—or seemed to have sensed.

Third, an experience in which you seem to recall that p and in which you seem to recollect an item, or some items, that make it true that p possesses presentational

²² It might be possible to extend this account to immediate intuitions of analytic truths, such as the truth that bachelors are unmarried or that vixens are female foxes. I must leave exploring this development to another occasion.



 $^{^{21}}$ If one proposition can have more than one truth-maker, then this claim is compatible with the claim that if 2 > 1, then 2 > 1 is made true by the fact that 2 > 1. Further, the claim that logical truths or their forms are truth-makers for themselves does not warrant drawing the logical positivist conclusion that logical truths are not about the world, or that they lack factual content.

phenomenology with respect to p. That is, recollective experiences can possess presentational phenomenology, just as perceptual experience and intuition experiences can possess presentational phenomenology.²³

Fourth, and finally, it is possible for you to have an experience in which you seem to intuit that p and in which you seem to recollect an item, or some items, that make it true that p. You already know that 2 > 1 and so you might recall this. But suppose you do not. Suppose that instead you intuit that 2 > 1, and that you do not spend any time reflecting on 1, 2, or > relation, but, rather, rely on your retained intellectual item-awareness of these items. This is an experience in which you seem to intuit that 2 > 1 and in which you seem to recollect items that make it true that 2 > 1.

Intuiting that p while recollecting items that make it true that p is different from recollecting that p while recollecting items that make it true that p. Both, however, possess presentational phenomenology, since both are experiences in which you seem to be aware of an item, or some items, that make it true that p. So, for this second type of unreflective intuition that I've been discussing: you merely entertain and hold in mind the proposition that p, and while you do not engage in any present reflections that endow your experience with presentational phenomenology with respect to p, your experience does have presentational phenomenology with respect to p because it is partly based on retained—or seemingly retained—intellectual item-awareness of an item or items that make it true that p.

7 Philosophical intuitions

All of the examples so far have been logical or mathematical. There are also philosophical intuitions. In this section I want to review some considerations that suggest philosophical intuitions are rather like logical and mathematical intuitions, just different in their subject matter.

Take mereological intuitions. When I have intuition experiences representing certain mereological propositions, such as the proposition that nothing can have only one proper part, for example, my experiences seem to me similar in their structure to Albert's experience representing that every concave figure can be rounded out to a convex figure that bounds a greater area in a smaller perimeter. In this case, what I do is I imagine an arbitrary object and I imagine removing an arbitrary proper part of it, leaving behind at least one other proper part. When I do this it both intuitively seems to me that no object can have only one proper part, and

²⁴ It is a difference between intuition and perception that there are no perceptual experiences in which you seem to perceive that p and in which you seem to recollect an item, or some items, that make it true that p. Perception is presentational in the sense that I have been discussing, and it is also an experience as of the presence—in the sense of the being here and now—of the items presented in it.



²³ It is important to distinguish between two properties an experience might have: the first is that of possessing presentational phenomenology, and the second is that of representing something as present, i.e., here and now. Recollective experiences can possess the first even if not the second.

I seem to be intellectually aware of an operation of removing an arbitrary proper part from an arbitrary object in virtue of which this is true.²⁵

Other of my intuition experiences representing philosophical propositions seem to me similar in their structure to the intuition experience representing that 2>1 discussed in the previous section. That is, in them I seem to intuit a proposition, and an item, or some items, that make that proposition true seem present to mind in the manner of retained intellectual item-awareness. For a trivial example, just take the proposition that, *pace* Keats, beauty isn't truth.

The most widely discussed philosophical intuitions are thought experiment intuitions. Take a classic thought experiment—Gettier's thought experiment involving Smith, Jones, and the proposition, P, that the man who will get the job has ten coins in his pocket. There is some controversy over just what becomes intuitively apparent in reflecting on Gettier's case. ²⁶ Here are some candidates:

- (1) In the story: Smith has a justified true belief that P, but does not know that P.
- (2) Possibly: One can have a justified true belief that P, but not know that P.
- (3) If a thinker were related to P as Smith is according to Gettier's text, he/she would have a justified true belief that P, but not know that P.
- (4) Necessarily: if every element in the Gettier story is true, then someone has a justified true belief that p, but does not know that p.

Claim (1) is about what is true in a story. Claim (2) is a modal claim about possibility. Claim (3) is a counterfactual. According to Williamson, what we intuitively judge in reflecting on Gettier's case is something like (3), which then plays a role in a bit of reasoning supporting (2). Williamson argues further that because (3) is the content of our intuitive judgment, this judgment does not amount to a priori knowledge. Tchikawa and Jarvis find this result alarming. They argue that (4)—a modal claim about necessity—more accurately reflects the content of what intuitively seems true in reflecting on Gettier's case than Williamson's (3). Williamson's argument that our intuitive judgment does not amount to a priori knowledge fails if (4) is its content. Reflecting on Gettier's case than Williamson's argument that our intuitive judgment does not amount to a priori knowledge fails if (4) is its content.

My own view is that *all* of (1) through (4)—and more—can seem intuitively true in reflecting on Gettier's case. Only *some* of these propositions, however, are *basically* intuitively apparent. The distinction between what basically and what non-basically perceptually seems to be the case can be extended to intuition. It basically intuitively seems to you that p if your intuition experience representing that p has presentational phenomenology with respect to p—that is, is an experience in which you seem to be aware of an item, or some items, that make it true that p. It non-basically intuitively seems to you that p if your intuition experience representing that p lacks presentational phenomenology with respect to p—that is, is an experience in which you do not seem to be aware of an item, or some items, that

²⁸ See Ichikawa and Jarvis (2009).



²⁵ This need not be genuine removal, such as physical detachment. The operation might just consist of isolating the part in thought.

²⁶ See, for example, Williamson (2008) and Ichikawa and Jarvis (2009).

²⁷ See Williamson (2008).

make it true that p. When (3) intuitively seems true to me, it seems so non-basically: I do not seem to be intellectually item-aware of an item that makes (3) true. When (1) intuitively seems true to me, however, it seems so basically: I do seem to be intellectually item-aware of an item—the fictional scenario—in virtue of which (1) is true. Even though all of (1) through (4) might intuitively seem true to someone reflecting on Gettier's case, then, there might be differences among them with respect to whether they basically or non-basically intuitively seem true.

Given this distinction between basic and non-basic intuitive seeming, one might accept everything I have said here and also accept Williamson's plausible contention that intuitive knowledge that (3) is true is not a priori. Recall the choice advocates of Presentationalism_P had between unrestricted DPJ and restricted DPJ^R. Advocates of Presentationalism_I face a similar choice between unrestricted DIJ and restricted DIJ^R:

(DIJ^R) If it *basically* intuitively seems to you that p, then you thereby have some *prima facie* justification for believing that p.

Suppose there is a good argument that proponents of Presentationalism_I should adopt DIJ^R . Further suppose, as is plausible, that in general intuition experiences representing (3) as true do so non-basically. It follows that even though (3) intuitively seems true, one's justification for believing (3) depends in part on something other than one's intuition experience. Suppose it depends on background skills in evaluating the relevant kinds of counterfactuals, which background skills depend on one's having had some appropriate range of sensory experiences. Then one might agree with Williamson that if one comes to know (3) by intuition, this intuitive knowledge is not a priori. That said—even given the relevant suppositions—it does not follow that our intuitive knowledge of (1) isn't a priori. Nor does it follow that our intuitive knowledge of (2) or of (4) isn't a priori.

I will not attempt to decide between DIJ and DIJ^R here. Whichever turns out to be preferable, it should be clear that the presentationalist view of intuitive justification that I initially defended for geometrical intuition, applies naturally to other sorts of mathematical intuition, logical intuition, and also various sorts of philosophical intuition.

8 Concluding point

In this paper I've been defending an answer to the question: "In virtue of what do our intuitions justify us in believing things?" I have already pointed out some of the relations that hold among this question and two others: "What are intuitions?" "Do intuitions justify us in believing things?"

There are additional questions that I have not discussed, but that will occur to anyone familiar with the philosophical literature bearing on intuition. For example:

²⁹ This claim is compatible with a range of views about what exactly fictional scenarios are. Further, one might even deny that there are such things, but still accept the phenomenological claim that I am making—that in having an intuition presenting (1) as true, I *seem* to be aware of a fictional scenario.



"What metaphysical picture should we have of how intuition works, given that its target domain is abstract?" "How should fans of intuition respond to skeptics—and in particular skeptics that appeal to recent experimental studies that purport to embarrass intuition in various ways?"

The main point that I want to make here is that it is possible to pursue issues about the nature of intuitive justification, the metaphysics of intuition, and skeptical challenges to intuition relatively autonomously. An account of the nature of intuitive justification presupposes that there is a coherent metaphysical picture of intuition and that the skeptical challenges can be met. But it need not favor one positive metaphysical picture over another, nor one way of responding to the skeptical challenges over another.

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