

# Phenomenal Objectivity and Phenomenal Intentionality

## *In Defense of a Kantian Account*

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Perceptual experience has the phenomenal character of encountering a mind-independent objective world. What we encounter in perceptual experience is not presented to us as a state of our own mind. Rather, we seem to encounter facts, objects, and properties that are independent from our mind. In short, perceptual experience has *phenomenal objectivity*. Phenomenal objectivity distinguishes perceptual experience from those types of experience, for example mood experiences, that have the phenomenal character of presenting to one only the states of one's own mind. An account of phenomenal objectivity would be useful to believers in phenomenal intentionality—a form of intentionality that is constituted by phenomenality. This chapter proposes and defends a Kantian account of phenomenal objectivity.

## Introduction

Some experiences, such as moods, emotions, nausea, and dizziness present our own states to us. We can call these experiences *self-presenting* experiences.<sup>1</sup> In contrast to self-presenting experiences, perceptual experiences typically present external things to us. We can say that perceptual experience belongs to the class of *other-presenting* experiences.<sup>2</sup>

The distinction between self-presenting and other-presenting experiences is, in my view, a phenomenological distinction. Self-presenting and other-presenting experiences differ not only with respect to what they typically present, but also with respect to their phenomenal character.<sup>3</sup> There is a general phenomenological feature in virtue of whose presence/absence experiences are

other-presenting/self-presenting. I call this feature *phenomenal objectivity*. The claim that perceptual experiences typically have phenomenal objectivity is a substantive claim and I shall say more in its defense later in the chapter. At this stage, however, I shall take it for granted.<sup>4</sup>

This chapter outlines and defends a phenomenological account of phenomenal objectivity. By this I mean an account that offers a reduction of phenomenal objectivity to allegedly more fundamental phenomenal features.<sup>5</sup> I believe that this account would be beneficial for the phenomenal intentionalist. Let me explain why.

Phenomenal intentionalists typically hold that there is a kind of intentionality that is constituted by phenomenality.<sup>6</sup> This idea implies that the conditions that a state needs to satisfy in order to count as a state with phenomenal intentionality are phenomenal conditions. One task for the phenomenal intentionalist is thus to provide an account of the phenomenal conditions that constitute phenomenal intentionality. We can call this the constitution problem. One way to solve the constitution problem is to equate the conditions for phenomenal intentionality with the conditions for phenomenal objectivity. It is easy to see why one might be tempted to do so. Note that experiences with phenomenal objectivity have other-presenting phenomenal character. One might regard this feature as constituting the core of phenomenal intentionality. It is in virtue of having this phenomenal directedness toward the other that experience has phenomenal intentionality. So it is in virtue of having phenomenal objectivity that experience has phenomenal intentionality. Thus a theory that explains the phenomenal conditions in virtue of which experience has phenomenal objectivity would thereby explain the phenomenal conditions in virtue of which experience acquires phenomenal intentionality. In this construal, explaining phenomenal objectivity would be at the core of any phenomenal intentionality research program by providing a solution to the constitution problem.

The phenomenal intentionalist might, however, refrain from equating the phenomenal-intentional with the phenomenal-objective. The phenomenal intentionalist might hold that some states that possess phenomenal intentionality lack phenomenal objectivity. For example, in some views, self-presenting states, such as mood experiences, display phenomenal intentionality. One who assumes this will not look at a theory of phenomenal objectivity as a theory of phenomenal intentionality. Nevertheless, she can regard such a theory as a theory of other-presenting phenomenal intentionality. This theory would not explain the phenomenal conditions that are constitutive of phenomenal intentionality. Rather, it would explain the phenomenal conditions in virtue of which phenomenal intentionality is differentiated into other-representing and self-representing types. We can call the problem of providing an account of the phenomenal conditions in virtue of which phenomenal intentionality gets

divided into its main types the division problem. Assuming that self-presenting and other-presenting forms of phenomenal intentionality are its main types, we can conclude that a theory of phenomenal objectivity would solve the division problem.

An account of phenomenal objectivity can thus be beneficial to the phenomenal intentionalists by solving either the constitution problem or the division problem. I hold that a theory of phenomenal objectivity solves the constitution problem. But for the purposes of this chapter I shall not defend this idea against the alternative reading, which claims that a theory of phenomenal objectivity solves only the division problem. The reader can decide how she or he wants to look at this issue. In either choice, an account of phenomenal objectivity is important for the phenomenal intentionalist.

The view that I will be offering in this chapter is primarily inspired by my reading of Kant's *Critique of Pure Reason*. Thus, I regard it as a Kantian view. The next section explains the view and clarifies why I call it Kantian. The second section connects the view to contemporary psychology of perception and provides a preliminary motivation for it. The last section provides an argument for the view. In the remainder part of this section, I say more about what I mean by a phenomenological account.

The account offered in this chapter aims at answering the following question: what are the phenomenal facts in virtue of which perceptual experience has phenomenal objectivity? This question is a phenomenological question. In saying this, I want to insist that an answer to this question should appeal to phenomenological facts. For example, an explanation in terms of the sub-personal mechanisms that distinguish experiences with phenomenal objectivity from those that lack it would not do. Such an answer, insofar as it leaves out matters at the personal level, is not a phenomenological answer.<sup>7</sup> Similarly, one could not answer this question by appealing to the fact that the brain processes that underlie perceptual experience track external facts while the brain processes that underlie other experiences, such as emotions, only track the conditions of the brain and the body. For appealing to tracking relations is appealing to facts that fall outside what is given at the personal level. In general, a phenomenological question seeks an answer at the personal or phenomenological level. Thus, it can only be satisfactorily answered by appealing to how things are given in, or to, phenomenal consciousness.<sup>8</sup>

Obviously, such remarks do not offer a positive characterization of a phenomenological answer. They only explain what would not count as one. So let me say a few words by way of a positive characterization. As I'm using the term, phenomenological answers are given in terms of instantiations of phenomenal properties. Such answers sometimes appeal to the instantiation of primitive monadic phenomenal properties. For example, if you ask how visual experience presents redness, a short answer could be that it does so in virtue

of instantiating a monadic phenomenal property that some call phenomenal red. If one is a primitivist about phenomenal red then one's phenomenological explanation ends here, because in the primitivist account the most fundamental phenomenal fact that explains the phenomenal character associated with experiences of red is the instantiation of phenomenal redness.

However, phenomenological explanations can sometimes be reductive. For example, one might reduce phenomenal redness to more primitive phenomenal properties such as phenomenal hue, saturation, and brightness. Such a reductionist would hold that phenomenal hue, saturation, and brightness are more fundamental than phenomenal redness. Thus the instantiation of phenomenal redness is metaphysically explained in terms of instantiations of these more fundamental phenomenal properties. This would be a case where a phenomenological explanation is informative for being reductive.

Other examples of this strategy are Hume's reduction of the impression of necessary connection to the "determination of the mind" to move from one idea (or impression) to another and Berkeley's view, which according to some commentators, reduced experiences of spatial relations to expectations involving tactile or proprioceptive experiences.<sup>9</sup>

The account that I shall be offering here is reductive in this sense. I shall argue that phenomenal objectivity is constituted by the instantiation of more fundamental properties. Explaining what these properties are requires some stage setting. This is what I shall do in the next section.

## 1. The Kantian Thesis

There is strong textual evidence that a decade before the publication of the first *Critique* Kant had become interested in what we nowadays call the problem of intentionality. In a famous letter to Herz, he writes about this problem and its significance:

I noticed that I still lacked something essential, something that in my long metaphysical studies I, as well as others, had failed to pay attention to and that, in fact, constitutes the key to the whole secret of hitherto still obscure metaphysics. I asked myself, namely: *What is the ground of the relation of that in us which we call 'representation' to the object?* (Correspondence, Letter to Herz, 1772, emphasis mine)

Kant's formulation of the problem of metaphysics changes in the first *Critique*. There, he describes the problem as that of explaining the possibility of synthetic a priori cognition. Arguably this change in formulation does not mark a radical change in Kant's conception of the problem. Rather, it indicates his

realization that a solution to the problem will also show how we can have a type of cognition that is both a priori (independent from experience) and synthetic (not determined only by conceptual relations).

There are still passages in the *Critique*, however, where Kant explicitly talks about the problem of the relationship between representations and objects. For example, in the Second Analogy, after remarking that pure representations are “inner determinations of our mind in this or that temporal relation,” he asks:

Now how do we come to post an object for these representations, or ascribe to their subjective reality, as modifications, some sort of objective reality? (CPR, A197/B243)

The answer comes in the same paragraph:

If we investigate what new characteristic is given to our representations by the relation to an object, . . . we find that it does nothing beyond making the combination of representations necessary in a certain way, and subjecting them to a rule; and conversely that objective significance is conferred on our representations only insofar as a certain order in their temporal relation is necessary. (CPR, A197/B243)<sup>10</sup>

Kant’s question is how representations that are mere modifications of the mind acquire “objective significance.” His answer seems to be that representations acquire their objective significance in virtue of necessary temporal connections between them. In the Schematism section that precedes the Analogies, Kant has already argued that this necessary temporal connection depends on synthetic activities that somehow involve the schemas of the pure concepts of understanding or categories.

My contention is that both Kant’s question and his answer can be read in a phenomenological-cum-psychological way. Accordingly, to ask how representations acquire “objective significance” is to ask how representations acquire phenomenal objectivity, and to say that “objective significance is conferred to our representations only insofar as a certain order in their temporal relation is necessary” is to say that representations acquire their objective significance in virtue of having the phenomenology of being combined in time in accordance with schematic rules. Schemas, in the interpretation that I wish to propose, embody the rules that guide the mental activity of synthesis. This activity unifies the members of the manifold of representations in time, and the phenomenology of combining mental representations in time in accordance with schematic rules is what confers objective significance to our representations which without this will be mere modifications of the subjective states of the mind and thus at best only self-presenting.

This interpretation can of course be challenged. First, Kant's notions of objective significance and the necessary combinations of representations can both be interpreted non-phenomenologically. Second, the relationship between synthetic activities and the combination of representations can be understood in different ways. Should we understand Kant's idea of combination as a by-product of an act of synthesis, or should we understand combination as identical with an ongoing activity? In the first interpretation, acts of synthesis produce a complex relational structure in our representational manifold, where the relationship between the act and the structure is analogous to the relationship between the activity of building and the structure that results from it. In the second interpretation, synthetic activity constitutes the relational structure in the manifold. In this view representations are related to each other in virtue of the fact that an ongoing synthetic activity in time somehow incorporates them. My proposed interpretation attributes to Kant the second type of view.

There are also important interpretational puzzles about Kant's account of schemas. In some passages, Kant writes as though schemas are rules that ground the activities of synthesis.<sup>11</sup> It is tempting to rely on these passages and equate schemas with a type of representation that guides the activity that constitutes or produces combinations among other representations in time. However, there are passages in which Kant seems to equate schemas with the structure that is produced or constituted by synthetic activities.<sup>12</sup> These passages suggest that "schema" is just Kant's fancy term for talking about combination in time. My interpretation attributes to Kant the view that schemas are representations that guide activities of synthesis.

A related puzzling issue is the relationship between schemas and concepts, in particular the relationship between transcendental schemas and the categories. Before the Schematism section Kant often speaks as though the categories furnish the rules that guide the activities of synthesis. However, in the Schematism section this role seems to be assigned to transcendental schemas.<sup>13</sup> There are at least three ways to resolve this tension. One option is to equate the transcendental schemas with the categories. The other is to equate transcendental schemas with the structure that results from or is constituted by the activity of synthesis and assign pure concepts the role of the rules that guide these activities. A third option is to equate schemas with the guiding rules and interpret Kant's earlier talk about the relation between the categories and the rules as presupposing schematic mediation. Here, my interpretational choice has been the third one.

Another important feature of Kant's view is his idea that schemas are neither sensible nor intellectual. In this view, a schema is a specific type of representation that is intermediary between conceptual and non-conceptual representations and belongs to the faculty of imagination.<sup>14</sup> Kant's account

of imagination has been the subject of intense exegetical controversy partly because of its apparent incompatibility with his division of mental faculties into sensibility, understanding, and reason. I want to claim here, again without argument, that Kant's notion of a schematic representation can be equated with perceptually encapsulated innate knowledge.

My interpretation attributes to Kant a set of phenomenological and psychological theses based on the mentioned interpretational choices. All of these interpretational choices require careful exegetical defense. However, this chapter is not the place to do so. Thus, rather than claiming that the view that I am describing is Kant's, I shall call it a Kantian view.

My main aim is to defend the phenomenological component of the Kantian view. As a first approximation, the thesis is that phenomenal objectivity is constituted by the phenomenology of a necessary combination of representations in time. I have explained what I mean by phenomenal objectivity before. Let me use an example to explain how I understand the idea of the phenomenology of a necessary combination of representations.

Imagine walking toward a tree as you are looking at it. When you get closer, the visual angle through which you see the tree grows in size in an inverse relation to your distance from the tree. If things go well and your perception is veridical your representation of the visual angle through which you see the tree and your representation of your distance from the tree co-vary with each other in a law-like manner. How should we construe your visual phenomenology in this case? First, there is something that it is like to visually experience an object through a particular viewing angle. This aspect of your visual phenomenology changes as you get closer to or farther away from the tree. Second, there is something that it is like to visually experience an object to be at a particular distance from you. This aspect of your visual phenomenology also changes as you get closer to or farther away from the tree. These two aspects do not change in isolation. They co-vary in a law-like manner. Now, one might hold that there is a third phenomenological element here. There is something that it is like to experience the visual angle and the relative distance as co-varying in the particular law-like manner that they do and this additional phenomenological element is over and above the law-like covariance of the other two experiences and is constant throughout their change. My proposal is that we should understand Kant's talk about the necessary combination of representations in time in this way.

Let us call the phenomenology associated with experiencing two properties as co-varying in accordance with the rules embodied in schemas Schematic Dynamical Unity. The phenomenological component of the Kantian view claims that there is a constitutive relation between schematic dynamical unity and phenomenal objectivity. Throughout the chapter, I shall refer to this claim as the Kantian thesis and present it in the following way:

**Kantian thesis:** Experience has phenomenal objectivity in virtue of having Schematic Dynamical Unity.<sup>15</sup>

Why should we accept the Kantian thesis? Understanding Kant's own argument for the thesis requires engaging with the complex dialectic structure of the *Critique*. Rather than trying to do so, I shall offer my own reasons for embracing the Kantian thesis. One of these reasons has to do with the psychological aspect of the Kantian thesis. In the next section I shall show that the empirical science of perception supports the psychological analogue of the Kantian thesis. The second reason is phenomenological. The last section offers a phenomenological argument in support of the Kantian thesis.

## 2. The Kantian Thesis and Empirical Psychology

In this section I want to argue that experimental psychology seems to support what we might call the psychological counterpart of the Kantian thesis and thereby indirectly supports the Kantian thesis. By the psychological counterpart of the Kantian thesis I mean the thesis that the psychological mechanisms that underlie schematic dynamical unity are the same as (or an important component of) the psychological mechanisms that underlie phenomenal objectivity. If the psychological mechanisms are related in this intimate way then it is reasonable to assume that the phenomenal properties that are grounded in them are also related in an intimate way.

What are the psychological mechanisms that underlie phenomenal objectivity? The answer to this question is not easy, because psychologists hardly ever use concepts such as phenomenal objectivity. In order to answer this question we need to connect our phenomenal talk to the psychological talk. In order to do so, I want to first draw your attention to an important feature of experiences with phenomenal objectivity.

Our everyday perceptual experiences incorporate a duality in their presentational content. They inform us about the properties of objects around us, but that is not all they do. Our everyday perceptual experiences also inform us about the point of view that we occupy in relation to objects. When you look at a tilted coin, you typically experience it as a circular object. But you also experience something about the spatial relation that you have to the coin. For example, you experience the coin as tilted in relation to what psychologists often call the fronto-parallel panel, an imaginary plane that passes through your two eyes. Here, your point of view is determined mainly, but not exhaustively, by the location that you and the coin occupy in physical space and the physical shape of your perceptual apparatus. A similar point applies to color experience and experiences in other perceptual modalities. When you see a uniformly red table, you typically experience it as a red object. But your visual experience also



informs you of your relation to the table with respect to what we might call the illumination space. If the table is lit by non-uniform light, your experience of the table informs you of that. You occupy a point of view on the table in the illumination space.

The general point here is twofold: firstly, experiences with phenomenal objectivity always have the duality that is illustrated in the examples given earlier and secondly, self-presenting experiences lack it.<sup>16</sup> Nausea, pains, itches, and sadness are all self-presenting experiences. They inform you of your own properties and qualities. However, they do not inform you of anything like a point of view that you have in relation to these qualities. I want to insist that all and only experiences that have this duality are experiences with phenomenal objectivity. Thus, if we want to study the psychological mechanisms that underlie phenomenal objectivity we should study the psychological mechanisms that underlie this duality.

The good news for us is that psychologists study the phenomenon of duality under the title of perceptual constancies. We encounter perceptual constancies when despite changes in our point of view the properties that we experience objects as having remain constant. Psychologists hold that visual representations of many properties such as shape and color display perceptual constancies. It is also widely held that perceptual constancies are not confined to vision. For example, representations of tactile texture, solidity, and auditory representations of volume display perceptual constancies.

When we study the mechanisms that according to the psychologists underlie perceptual constancies we can see that this characterization is exactly what we expect from a characterization of the mechanism underlying schematic dynamical unity. Let me illustrate this with an example. When you walk toward a tree as you are looking at it, the image that the tree projects on your retina grows in size. But you do not experience the tree as growing in size; you experience its size as constant. Psychologists often call this phenomenon size constancy and the aspect of size that remains constant intrinsic size. I shall refer to it as objective size.

There is some controversy about the mechanisms underlying the computation of objective size, but most psychologists hold that our visual system computes objective size based on the relationship between relative distance and visual angle.<sup>17</sup> According to this theory, the computation of objective size is based on the following mathematical formula:  $bc = 2d \cdot \tan(\theta/2)$ , where  $bc$  is the objective size of the object,  $d$  its relative distance from the subject, and  $\theta$  the viewing angle (see Figure 7.1).<sup>18</sup>

This computational mechanism has the exact structure that we expect from a mechanism that would underlie schematic dynamical unity. I claimed earlier that schematic dynamical unity consists in experiencing properties as co-varying in accordance with a particular rule. Experiences with schematic

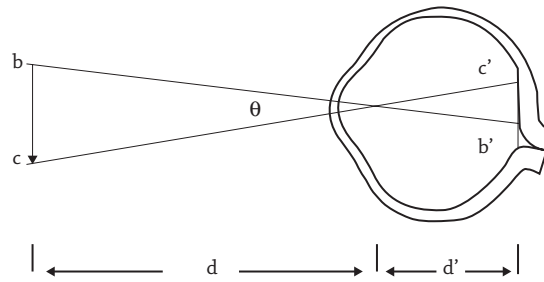


Figure 7.1 SIZE CONSTANCY.

dynamical unity thus have a specific structure that involves the experience of certain properties and the experience of their law-like correlation. Since it is reasonable to assume that the psychological phenomena that underlie experience mirror the structure of experience, we should expect the psychological mechanisms underlying schematic dynamical unity to contain a mechanism for determining whether the value of some of representations co-vary with each other in accordance with a specific rule. And this is exactly what we see in the standard account of size constancy. In this proposal, the brain determines whether the product of the value of relative distance and the viewing angle stays constant in order to represent the intrinsic size of the tree as constant.

If this reasoning is correct, then it is reasonable to assume that at least in the case of size constancy the psychological mechanism that underlies phenomenal objectivity has the same structural signature that we expect from the psychological mechanism that would underlie schematic dynamical unity. I want to claim without further argument that this observation generalizes to other cases of constancy. If this claim is correct then we will have a strong empirical argument in support of the Kantian thesis. At the moment I do not know whether this claim is correct. But I have said enough to motivate the weaker claim that the empirical science of perception seems to support the Kantian thesis. Armed with this, I want to move to the next section where I give a phenomenological argument for the Kantian thesis.

### 3. The Abductive Argument

According to the Kantian thesis, perceptual experience has phenomenal objectivity in virtue of instantiating schematic dynamical unity. In this section I want to provide an abductive phenomenological argument in support of this thesis. I argue that the Kantian thesis provides the best explanation for the absence of phenomenal objectivity in a paradigm case where it is absent. To do so, I want to first present the reader with the particular case in question.



Figure 7.2 AFTERIMAGE.

Focus on the black circle in the left rectangle in Figure 7.2 for a while and then shift your focus to the circle on the right. You will gradually experience an afterimage.

The afterimage is not experienced as a pattern on the page in the same way that the left is. We do not experience the afterimage as an objective pattern on the page. The experience of the afterimage does not manifest phenomenal objectivity. What could account for the absence of the phenomenal objectivity? I believe that the Kantian thesis provides the best explanation. This idea can be articulated in the following argument (from here on I shall refer to schematic dynamical unity as SDU):

**Abductive argument:**

- (1) Afterimages lack phenomenal objectivity.
- (2) The best explanation for (1) is that SDU is necessary for phenomenal objectivity.
- (3) SDU is sufficient for phenomenal objectivity.
- (4) The best explanation for (2) and (3) is that SDU constitutes phenomenal objectivity.

Conclusion: SDU constitutes phenomenal objectivity.

What follows defends each premise of the argument.

According to the first premise, afterimages lack phenomenal objectivity. This idea is intuitive. Nevertheless, one can argue for it by holding that the primary reason for our beliefs that afterimages are not objective is that the perceptual presentation of afterimages lacks phenomenal objectivity. This argument can be resisted in two ways. First, one might hold that afterimages have phenomenal objectivity, but because of some post-perceptual inference we do not believe that they are objective. I shall call this proposal the *post-perceptual defeat* proposal. A second way to resist the idea that afterimages lack phenomenal objectivity is to hold that afterimages do not have a verdict on matters of objectivity/non-objectivity. This might be attractive to someone who denies that perceptual experience and sufficiently similar experiences, such as afterimages, have any objective/non-objective content. Experience is silent about matters of objectivity/non-objectivity. Our beliefs to the effect that

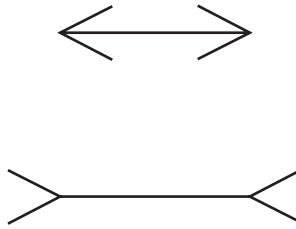


Figure 7.3 MÜLLER-LYER ILLUSION.

afterimages are not objective should be explained in terms of post-perceptual inference. I shall call this the *perceptual silence* proposal. In what follows, I want to show that these proposals are problematic.

Let us start with the post-perceptual defeat proposal. In this proposal, the verdict of experience is that afterimages are objective, but this verdict is defeated post-perceptually. However, this idea has counterintuitive implications. In particular, it implies that in the case of afterimages there is a discrepancy between the deliverances of experience and our beliefs regarding the status of afterimages. But this seems implausible. Let me elaborate.

The typical example of discrepancies between perceptual content and beliefs is the Müller-Lyer illusion (Figure 7.3).

The two arrows in Figure 7.3 seem to have unequal lengths, but in fact their lengths are equal. Your perceptual experience provides *prima facie* reason for you to believe that the lines are unequal. Thus, it is likely that you will form the belief that the lines are unequal if you do not know that this is an illusion. But if you know about the illusion your background beliefs might defeat the verdict of the experience and you might form the belief that the two lines are equal. As a result, there will be a discrepancy between what your experience presents and what you believe. And this discrepancy is apparent to you. To generalize, when the verdict of experience is defeated post-perceptually we normally encounter an apparent discrepancy between our beliefs and the verdict of experience. But this discrepancy is absent in the case of afterimages. When we form the belief that afterimages are not objective it does not feel as though there is a discrepancy between our belief and the verdict of experience. So the post-perceptual defeat proposal should be rejected.

Let us turn to the second proposal. In this proposal, experience is silent about matters of objectivity/non-objectivity. It presents afterimages in the same way that it presents normal colors. The only difference is that we believe that the colors of afterimages are not objective because of post-perceptual reasoning. Now, “reasoning” could be understood in two different ways, namely, conscious or subconscious. The first option does not seem to be compatible with what we are conscious of. When we experience afterimages, it does not seem that we engage in any reasoning to the effect that they are not objective. So the only reasoning that might be going on here is subconscious reasoning.<sup>19</sup>

Suppose the reasoning is subconscious. When we experience an afterimage some sub-conscious reasoning leads us to believe that the afterimage is not objective. But this again has a counterintuitive implication. The reasoning that results in the belief is subconscious, and the experience does not present the afterimage as objective. One implication of this is that we should have no idea why we have such a belief. From our point of view, all that happens is that the belief that the afterimage is not objective pops up in our head. But we can point neither to our experience nor to any conscious reasoning as the ground for this belief.

The above result, however, is very counterintuitive. An example helps us see why. Compare a person with normal vision with a person with blindsight. In the standard construal, blindsight patients do not have visual experiences, but if prompted in the right way they can correctly guess some of the features of objects at a rate higher than chance. If you ask a normal person why she thinks the painting in front of her is tilted, she can point to it and say: “because it looks that way.” Her experience presents her with something that she takes as evidence for her belief. But the same response is not available to a blindsight patient. From her point of view, the idea that the thing in front of her is tilted just pops up in her mind. Her belief is epistemically blind.<sup>20</sup> This helps us see why the above proposal is problematic. For it implies that our situation with respect to afterimages is analogous to the case of blindsight. But it is very implausible that this is our situation. For example, learning that her belief concerning the orientation of the object is correct would surprise a patient with blindsight. For, from her point of view, her guess is groundless. In contrast, learning that afterimages are not objective does not surprise us. After all, they always looked that way. I thus hold that both the post-perceptual defeat and the perceptual silence proposals are problematic. So we have good support for the first premise of our argument: afterimages lack phenomenal objectivity.

According to the second premise of the argument, the best explanation for the absence of phenomenal objectivity in the case of afterimages is that SDU is necessary for phenomenal objectivity. I shall defend this claim by showing that (a) afterimages lack SDU and (b) other explanations for why afterimages lack phenomenal objectivity are problematic.

We can support the claim that afterimages lack SDU by the following observations. First, afterimages do not satisfy some implicit anticipatory conditionals that are satisfied in the case of normal objects. For example, if you blink as you are looking at the left rectangle in Figure 7.2 it will appear as soon as you open your eyes. But the afterimage does not appear the moment you open your eyes; it is absent for a short period after blinking and gradually appears again. If you tilt your head as you’re looking at the left rectangle it will not rotate. But if you tilt your head as you are experiencing the afterimage it will disappear for a short period and then appear rotated. If you move the page closer to yourself as you are looking at the rectangle its perceived size will not change. But if you

move the page closer, the afterimage appears smaller after a moment of disappearance. Second, we are not surprised that these anticipatory conditionals are not satisfied. Our little phenomenological experimentation with the afterimage does not tell us that the afterimage is behaving in a way that breaches our expectations. We simply do not have the implicit expectations that we have in the case of normal color patches.

These two observations could be put in the service of an argument that shows that afterimages lack schematic dynamical unity. Since afterimages do not satisfy normal anticipatory conditionals, and they do so without surprising us, we should conclude that there are no such implicit anticipations in the first place. The experience of the afterimage does not have the normal anticipatory contents that the experience of real colors has. This in turn implies that afterimages lack schematic dynamical unity, because it is plausible to assume that there is an intimate relationship between schematic dynamical unity and the specific sorts of anticipatory conditionals about how experiences co-vary with each other.<sup>21</sup>

I have argued that afterimages lack SDU. This supports the claim that one explanation for the lack of phenomenal objectivity in the case of afterimages is that SDU is necessary for phenomenal objectivity. In order to show that this is the best explanation, we need to rule out the claim that the absence of other phenomenological features that are necessary for phenomenal objectivity explains the absence of phenomenal objectivity. I shall do so by considering a few initially plausible candidates.

One option is that the afterimage is partially transparent. So the afterimage in Figure 7.2 is more transparent than the rectangle on the right side. But it seems implausible that non-transparency is necessary for phenomenal objectivity, for many patterned surfaces that we see in our everyday encounter with the world are partially transparent. But this does not make us experience the patterns as non-objective. We see through colored windows, glasses and so on. These are partially transparent surfaces. But the partial transparency of the patterns on these surfaces does not make them lose their apparent objectivity.

Another candidate is that afterimages do not have the same degree of intensity as normal experiences. Sounds can be loud, and smells can be strong. Perhaps a similar feature could be ascribed to experiences of colors in terms of brightness or saturation. It might be plausible that afterimages are less intense in this sense; they are not as bright or saturated as normal color experiences. But again, this cannot be the reason for the absence of phenomenal objectivity. We experience many colored surfaces in our everyday encounters with objects that are not bright or saturated. But this does not make us experience those colors as non-objective.

I conclude that explanations in terms of transparency or intensity cannot account for the absence of phenomenal objectivity in the case of afterimages.

These proposals have implausible implications. Let me thus turn to a proposal that does have implausible implications. I shall argue that, nevertheless, the Kantian view is preferable to this proposal.

It is not uncommon to associate phenomenal objectivity with the representation of objective space.<sup>22</sup> One might hold that to represent a property as objective is to represent it as instantiated *out there*, somewhere deep in space. Can we invoke this idea to account for the lack of phenomenal objectivity in afterimages? This might strike some as tempting, but, in my view, it is ultimately unsatisfactory. Before explaining the reason let us first see how this proposal might be applied to the case of afterimages.

According to this proposal, afterimages are not strictly speaking experienced as having an objective location deep in space. Consider Figure 7.2 again. It is initially tempting to think that the afterimage is experienced as located on the sheet of paper. So it is initially tempting to hold that afterimages are experienced as located in space, namely, where the paper is. However, further reflection shows that this is wrong. Afterimages are in fact experienced as being overlaid on our visual field. The surface of the paper provides the background that is required for experiencing afterimages. So afterimages are not experienced as being “out there.” The proponent of the spatial location proposal appeals to this feature to explain why afterimages are not experienced as objective.

The spatial location proposal assigns a central role to the experience of objective location. Now, what do we mean by experiences of objective location? If you move your head or eyes in different directions, the retinal location of the projected image of objects changes, but you do not experience the objects as moving. This is a case of location constancy. There is something like experiencing objects as having location constancy, which we can call the experience of objective location. According to the spatial location proposal, the phenomenology of objective location is necessary for phenomenal objectivity. This is why its absence in the case of afterimages explains the lack of phenomenal objectivity.

We can distinguish between two versions of this proposal. In an unrestricted version, for any property, *p*, we experience *p* as objective partly in virtue of experiencing it as having the phenomenology of objective location. A more restricted version of the proposal limits it to a particular set of properties. Accordingly, there is a class of properties such that we experience them as objective partly in virtue of experiencing them as having objective locations.

The unrestricted version of the spatial proposal seems problematic. Experiences of many properties display phenomenal objectivity. We can experience shapes, sizes, locations, colors, tactile textures, tactile solidity, auditory volume, and so on as objective. But it is not clear how experiencing something as having objective location would be necessary for experiencing some of its

other properties as objective. Consider color constancy, for example. Due to changes in illumination throughout a day, the reflected wavelength of objects changes. But we do not experience their objective colors as changing. On the face of it, this seems to be completely independent from experiencing these objects as located deep in space. The same could be said about experiences of objective tactile texture and similar encounters.

The proponent of the spatial location proposal should thus adopt the restricted version of the view. The seemingly plausible option would be to restrict the view to spatial features such as shape and size. Maybe the phenomenology of objective location partly constitutes the phenomenology of objective size and shape.

But it seems to me that the Kantian thesis is a better explanation than the restricted version of the objective location view. This has two reasons. First, the Kantian thesis is non-restricted. The idea of schematic dynamical unity applies to all cases of constancy. So unlike the restricted spatial view that needs to provide a different explanation for objective representations of non-spatial properties, the Kantian thesis is a unified theory. Second, the Kantian thesis can explain the phenomenology of objective location. But on the spatial location view, the phenomenology of objective location should be regarded as primitive. If there is an explanation for it, it is sub-personal. I thus conclude that the Kantian thesis provides a better explanation for the absence of phenomenology of objectivity than the spatial location view.

This ends my reasoning against the alternative explanations of the lack of phenomenal objectivity in the case of afterimages. I have argued that explanations in terms of transparency, lack of intensity, and the absence of experienced objective location are either implausible or less desirable than the Kantian explanation. So, in the absence of other candidates, it is reasonable to suppose that schematic dynamical unity is necessary for phenomenal objectivity.

Let us summarize what we have so far accomplished. My aim in this section has been to defend the following argument:

### **Abductive argument**

- (1) Afterimages lack phenomenal objectivity.
- (2) The best explanation for (1) is that SDU is necessary for phenomenal objectivity.
- (3) SDU is sufficient for phenomenal objectivity.
- (4) The best explanation for (2) and (3) is that SDU constitutes phenomenal objectivity.

Conclusion: SDU constitutes phenomenal objectivity.

So far, I have defended the first two premises of the argument. In what follows I shall defend the last two premises.



According to the third premise, schematic dynamical unity is sufficient for phenomenal objectivity. My main support for this is that reflection in our experience supports it. Of course, this is an empirical claim. But let me provide some preliminary support for it by way of blocking an objection.

I have characterized schematic dynamical unity as the experience of the covariance of properties in accordance with certain rules or laws. But one might hold that this characterization is too easy to satisfy, because rules are easy to come by. One can even gerrymander rules that apply to the way after-images change. So it follows that schematic dynamical unity is present even in the case of afterimages and cannot be sufficient for phenomenal objectivity because afterimages lack phenomenal objectivity.

To see the flaw in this reasoning it helps to distinguish between the Kantian thesis and a simple regularity account of phenomenal objectivity. Such an account identifies phenomenal objectivity with regularity in the course of experiences. On this account it suffices that representations of some properties co-vary in accordance with some rule. But it is not required that these rules be associated with a specific form of phenomenology nor that they depend on a specific psychological mechanism. In the Kantian view, in contrast, the experience of schematic dynamical unity requires the activation of schematic representations which are associated with a specific form of phenomenology. A schematic representation is in effect a detector whose job is to test whether certain dynamic relations between the values of certain representations obtain. An abstract arbitrary rule that does not correspond to such a detector does not count as a schema. Thus in the Kantian view, schemas are not arbitrary rules; they should correspond to psychologically real detectors whose activation is phenomenologically manifest.

Our imaginary interlocutor might object that acquiring psychologically real detectors is easy. One can simply internalize rules based on past experience. For example, after a few encounters with afterimages one might form expectations that are satisfied by them and thereby experience them as conforming to certain rules.

In response we should note that it is one thing to internalize a set of expectations and it is another thing to have perceptually encapsulated detectors.<sup>23</sup> You can expect or believe many things. But, no matter what you believe or expect at the belief level, your perceptual system expects an increase in the apparent size of an object as you get closer to it. In the Kantian view, schemas are perceptually encapsulated sub-systems. More important, the phenomenology associated with the activation of schemas is, according to the Kantian view, different from the phenomenology of associations between representations due to past experience.<sup>24</sup>

The first three premises of the argument imply that there is a perfect correlation between phenomenal objectivity and schematic dynamical unity.

According to the last premise, the best explanation for this is that schematic dynamical unity constitutes phenomenal objectivity. The main threat to this premise is that the correlation between phenomenal objectivity and schematic dynamical unity is contingent. I shall defend the last premise of the argument by blocking this objection.

There are two ways that one might defend the contingency claim. First, one might argue that for all we have said it could still be the case that the neural mechanisms that underlie schematic dynamical unity and those that underlie phenomenal objectivity are separate and the correlation between them is only due to the way our nervous system is wired. In principle, these mechanisms can come apart and the association between phenomenal objectivity and schematic dynamical unity is contingent. I think we should reject this for the reasons that I offered in the previous section of this chapter. As far as I know there are no empirical studies on the neural mechanisms underlying what I have been calling schematic dynamical unities. But, as I argued in the previous section, there are good reasons to assume that the psychological mechanisms underlying schematic dynamical unity and those underlying phenomenal objectivity are the same. This suggests the sameness of the neural mechanisms.

A second way to defend the contingency claim is to argue that the concepts of phenomenal objectivity and schematic dynamical unity are a priori independent. Thus, we can coherently conceive of phenomenal objectivity without schematic dynamical unity. But this argument is also problematic. As Chalmers (2003) argues, phenomenal properties enter phenomenal concepts as constitutive components. Accordingly, whether the phenomenal concepts of phenomenal objectivity and schematic dynamical unity are a priori independent depends on whether the phenomenal properties that they pick out coincide in us, and our observations support the claim that they do. Thus the two concepts are not a priori independent when we consider them as phenomenal concepts.

This concludes my defense of the premise of the abductive argument for the Kantian thesis. Afterimages lack phenomenal objectivity and the best explanation for this is that schematic dynamical unity constitutes phenomenal objectivity.

## Conclusion

In this chapter I have proposed and defended a Kantian thesis about phenomenal objectivity. According to this thesis, perceptual experience has phenomenal objectivity in virtue of schematic dynamical unity. I have offered both empirical and phenomenological reasons in support of this thesis. I believe that this thesis and the broader view that it belongs to have significant implications for our understanding of phenomenal intentionality. The significance

of the account, however, is not restricted to its contribution to the phenomenal intentionality research program. Understanding how perceptual experience has objective content is important in its own sake. The account also offers a phenomenological interpretation of some of Kant's central ideas about representation of objectivity, an interpretation which can be regarded as a competitor to common interpretations such as Strawson's.<sup>25</sup> In Strawson's interpretation, the representation of objectivity requires highly sophisticated conceptual capacities such as the concept of the self and the conceptual capacity to distinguish between appearance and reality. This account has been criticized, in my view justly, as being hyper-intellectualized.<sup>26</sup> My proposal provides the initial steps toward giving a non-intellectualist interpretation of Kant's view.

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## Notes

1. My usage of "self-presenting" diverges from Chisholm's famous usage according to which a self-presenting mental state is one such that a subject who has it knows or is in the position to know that she has it.
2. The term "present" can be understood in different ways. Under one construal, it is an intentional verb that functions in the same way that ordinary intentional verbs like "believe" function. Sam can believe that Santa is fat, although there is no Santa. Analogously, on my usage sentences of the sort "experience presents x as p" imply neither the existence of x nor the instantiation of p by x. Also, on my usage "experience presents x as p" does not imply the inclination to form the belief that x is p on the part of the subject. My experience can be presenting a tree even if I know that I'm hallucinating and have no inclination to form the corresponding belief. Throughout the chapter, I am using "presents" in this non-factive/non-epistemic sense.
3. This distinction is not meant to be exclusive. It is in principle possible for an experience to be both self-presenting and other-presenting.
4. Further characterization of this intuitive idea depends on one's broader theoretical commitments about the nature of perceptual experience. For example, a representationalist who thinks that perceptual experiences are constituted by relations to contents might analyze phenomenal character by distinguishing between contents with objective purport and contents without objective purport, where a content with objective purport is one whose truth conditions go beyond the subject's current mental state. For now, I shall use the notion of phenomenal objectivity in its under-defined form and avoid further theoretical commitments.

5. I shall say more about this shortly.
6. For explicit defenses of this idea see Horgan and Tienson (2002) and Loar (2002). See also Kriegel (this volume).
7. Another unsatisfactory answer is a naïve realist one. For example, one might hold that perceptual experience has the phenomenology of objectivity because it is a relation to real objects and properties. This answer is unsatisfactory because phenomenological explanations are acceptable within the bounds of phenomena distinguishability, but the naïve realist answer does not satisfy this condition.
8. Thus the typical externalist strategies for determining the contents of mental states by appealing to tracking relations cannot help us with this question.
9. See Schwartz (1994) for a discussion of Berkeley's view.
10. All the quotations are based on the Wood and Guyer translation.
11. "Now, this representation of a general procedure of the imagination for providing a concept with its image is what I call the schema for this concept" (CPR A140/B180).
12. "The schema is in itself always only a product of imagination" (CPR B179/A140).
13. *Ibid.*, A140/B180.
14. This is based on: "Obviously there must be some third thing, which is homogeneous on the one hand with the category, and on the other hand with the appearance, and which thus makes the application of the former to the latter possible. This mediating representation must be pure, that is, void of all empirical content, and yet at the same time, while it must in one respect be *intellectual*, it must in another be *sensible*. Such a representation is the *transcendental schema*" (A138/B177).
15. My account also gets its inspiration from Noë (2004) and Siegel (2006).
16. Burge (2009) also stresses the relationship between representation of objectivity and perceptual constancies.
17. The main alternative accounts are texture occlusion offered by Gibson (1950), relative size offered by Rock and Ebenholtz (1959), and the horizon ratio offered by Sedgwick (1986).
18. The viewing angle can be computed from the size of the retinal projection,  $b'c'$ , and the distance of the retina from the lens by the formula:  $\theta = 2\arctan(b'c'/2d')$ .
19. One might think that the reasoning is conscious but it is so fast that we ignore it. I don't think that this option is plausible either. For a discussion of issues regarding fast reasoning processes and their manifestation in consciousness, see Masrour 2011.
20. Although I think this shows that the person with blindsight is not justified in her beliefs, this assumption is not required for the reasoning given. A belief is epistemically blind if the subject of the belief cannot provide an item that she regards as the basis or evidence for her belief. This presupposes, neither that the epistemically blind belief is not justified nor that the evidence that a subject provides in non-blind cases is really the evidence for the belief.
21. This intimate connection can be understood in different ways. For example, one might hold that schematic dynamical unity is partly constituted by implicit consciousness of these anticipatory conditionals. The other option is to hold that there is a causal relation between the mechanisms underlying schematic dynamical unity and the mechanisms that would ground these anticipatory conditionals. For our purposes at this stage, it does not matter which option we choose.
22. See Smith (2002), chapters 2 and 5.
23. By a perceptually encapsulated mechanism, process or representation I mean one whose causal interaction with other representations is mediated by the input or the output of the perceptual system. Perceptually encapsulated representations are immune from the influence of beliefs in the short term although they can be affected by beliefs in cases where perceptual learning happens.
24. This, in my view, is important for understanding Kant's answer to Hume's problem.
25. See Strawson (1966).
26. Burge (2009) offers the latest version of this criticism.

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